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DEPARTMENT OF HISTORY OF SCIENCE

BY

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## **Abstract**

The late eighteenth and nineteenth centuries saw a crisis in therapeutics as scientific developments overturned the theoretical underpinnings of humoral medicine, leaving room for lively and pluralistic discourses of health and healing. This thesis examines the controversies surrounding therapeutics in late nineteenth-century America through a microhistorical study of Eureka Springs, Arkansas, a spa town developed in the late nineteenth century. Physicians, scientists, patients and town boosters all contributed to conversations about the healing properties of the natural springs that dot the landscape around Eureka Springs.

Beginning in 1879 with Eureka's founding, this work covers its establishment as a health resort by means of aggressive investment and advertising and traces the changes in rhetoric and language of the town's promotional material and other ephemera through the early twentieth century. Its story, one peripheral but concurrent to that of mainstream medicine, makes clear that therapeutics, and by extension health, are constructed concepts, and that they are constantly being created by physicians, scientists, and the everyday person alike.



## **Introduction: Discourses of Health in the Therapeutic Revolution**

One of the most distinct characteristics of modern medical therapeutics is the symbiotic relationship it enjoys with science, particularly biology and chemistry. Clinical trials determine a drug's efficacy and safety before it is legally allowed to be sold to the general population. Physicians look to scientific studies when deciding if a particular method of treatment is best for their charges. Patients understand their chances of being cured—of overcoming illness and sometimes of survival—in medico-statistical terms. Scientific language is so ubiquitously present in medical texts that the two have become almost one and the same. Indeed, it has become strange, even alarming, to see the two separated.

An editorial in a 1998 edition of the *Journal of the American Medical Association*, noting the recent spike in interest in alternative therapeutics, stresses the need to subject these methods to scientific scrutiny. Authors Phil Fontanarosa and George Lundberg, both doctors, assert that in order to be considered “medicine,” therapies must be “scientifically proven, evidence-based... [and] supported by solid data.” There is no such thing as alternative medicine, because “anecdotes, beliefs, theories, testimonials, and opinions” are not substantive enough to qualify a practice as medicinal.<sup>1</sup> Scientific discourse, they believe, should be the only contributor in the construction of understandings of therapeutic efficacy.

By contrast, in the nineteenth century science and medicine stood in a very different and sometimes antagonistic relation to each other. Medicine was a long way from being defined by its proximity to science, and therapies' potencies were evaluated

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<sup>1</sup> Phil B. Fontanarosa and George D. Lundberg, “Alternative Medicine Meets Science,” *JAMA* 280, no. 18 (1998): 1618-19.

according to a wide array of standards, many quite different from the empirical, data-driven criteria of the modern-day scientist. The role the sciences (most notably biology) would play in what some have termed the “revolution” in remedial strategies in the early twentieth century was far from established, and many individuals and groups developed distinctive discourses they hoped would either contribute to or provide the foundations for a new therapeutic paradigm. These groups were not limited to scientific disciplines; some were doctors, trained at reputable and not so reputable medical schools, and some were people with no specialized training at all. During a time of therapeutic crisis, the doors of established medicine—so long held fast by the paradigm of humorally based bleeding and purging—were opened to a multitude of other methods of healing, as well as strategies for evaluating their efficacy.<sup>2</sup>

In this thesis I examine the conversation surrounding therapeutics in late nineteenth-century America through a microhistorical study of Eureka Springs, Arkansas. Eureka Springs was a spa town developed because of the natural springs that dot its landscape. It rapidly became a popular destination for medical tourists, often those who had first tried other more traditional therapies without success. Beginning in 1879 with Eureka’s founding, my work covers its establishment as a health resort by means of aggressive investment and advertising through the early twentieth century. I have restricted my study to just a few decades in the interest of conducting a vertical rather than horizontal analysis, with the goal of including more voices and perspectives than have been traditionally considered in the narrative of American therapeutics. Such

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<sup>2</sup> This framework for understanding the therapeutic crisis is derived from the work of Thomas Kuhn. See Kuhn, *The Structure of Scientific Revolutions*, 3rd ed. (Chicago: University of Chicago Press, 1996).

an approach allows me to tease out the voices of various participants—patients, Arkansas physicians, chemists, and town boosters—whose contributions to debates about therapeutics have not been considered in the existing historiography on the therapeutic revolution.

I have also restricted my study geographically for the same reasons. I chose Eureka Springs both for its relationship to hydropathy (a relatively popular and widespread alternative healing sect at mid-century) and for its location in the southern United States. Many studies of American medicine focus on its intellectual centers on the east coast. While I agree that it was in places with more established medical societies and infrastructures like Philadelphia and Baltimore that much of the more influential discursive work was being done by the medical profession, I believe that making visible less studied centers of medical knowledge-creation can provide keen insight into the role that actors not associated with professional medicine have played in its history.

Arkansas is particularly valuable as a site for the historian interested in the fringe of American culture and infrastructure during this period. The latter half of the nineteenth century was a particularly difficult time for the state, the aftermath of the Civil War and the era of reconstruction rendering it even further isolated from northern and eastern states culturally and intellectually. The war and its consequences had toppled Arkansas's social and labor structure as well as its economy, and its reintegration into the Union was accompanied by a contested Republican government

from 1868 until 1874.<sup>3</sup> Mass resistance combined with a lack of federal aid led then-governor Powell Clayton—later a major player in Eureka Springs’s story—to enact martial law in many counties, maintaining the peace to some extent but dealing a serious blow to inter-party cooperation.<sup>4</sup> The state was bleeding and divided long after the Union was reestablished.

Attempting to recover from the war, the causes of which still engendered disagreement and discontent, Arkansas’s citizens—many of the more active ones being new arrivals from the north—turned to resource exploitation and publicization of places like Eureka Springs, especially after the reinstatement of a Democratic-led government in 1874.<sup>5</sup> The town and the meanings created around it were thus simultaneously distant from more mainstream intellectual discourse and trying to become a part of it, all in the interest of resuscitating and reinventing a nationally relevant Arkansas. Therapeutics, I will show, proved an inroad, and its presence in the discourse surrounding the town indicates that the same conversations about medicine were being had in Eureka Springs as were taking place on a national scale. Moreover, looking at the edge of therapeutic

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<sup>3</sup> See Carl H. Moneyhon’s definitive work on the era for more detailed information; Moneyhon, *The Impact of the Civil War and Reconstruction on Arkansas: Persistence in the Midst of Ruin* (Baton Rouge: Louisiana State University Press, 1994).

<sup>4</sup> Though the situation in northwest Arkansas was mild relative to the rest of the state, Clayton did have to resort to drastic measures in one northwestern county in December of 1868. See Howard C. Westwood, "The Federals' Cold Shoulder to Arkansas' Powell Clayton," *Civil War History* 26, no. 3 (1980): 254.

<sup>5</sup> On efforts to encourage immigration as a means by which the state could be rebuilt, see Beverly Watkins, "Efforts to Encourage Immigration to Arkansas, 1865-1874," *The Arkansas Historical Quarterly* 38, no. 1 (1979): 32-62. On the makeup of those interested in doing so, see Moneyhon, "The Creators of the New South in Arkansas: Industrial Boosterism, 1875-1885," *Arkansas Historical Quarterly* 55, no. 4 (1996): 383-409.

discourse, in a location where medicine and science had a smaller, more disorganized professional presence than at the national level, provides an opportunity to make visible and consider in more depth the role vernacular actors played in the conversation.

Another benefit of studying marginal conversations like those surrounding the springs is that it raises questions about the current narrative of the marriage of science and medicine that privileges the role of bacteriology—a scientific discipline largely absent from Eureka Springs’s story, though it is very present in modern-day scientific medicine. Far more important in the construction of the healthfulness of the springs were climatology and chemistry, the former of which, as it is no longer as prevalent in western biomedicine, has been relatively understudied by medical historians.

As the first chapter will show, however, no scientific discipline was present in the initial meanings created, hinting at an indistinct dynamic between science and medicine in the town’s first two decades of existence. Indeed, this ambiguous relationship between science and therapeutics in the nineteenth century has been considered by historians more broadly for some time. In a collection of essays titled *The Therapeutic Revolution*, Russell C. Maulitz and Gerald L. Geison, writing on bacteriology and physiology respectively, argue that science’s utility and authority in medicine was ground for much debate through the turn of the century.<sup>6</sup> Some physicians saw the benefit of the work scientists were doing; many also felt threatened. A few contended that the push to integrate science into medical training and practice was

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<sup>6</sup> Gerald L. Geison, “Divided We Stand: Physiologists and Clinicians in the American Context,” 67-90 and Russell C. Maulitz, “‘Physician Versus Bacteriologist’: The Ideology of Science in Clinical Medicine,” 91-107 in *The Therapeutic Revolution: Essays in the Social History of American Medicine* eds. Morris J. Vogel and Charles E. Rosenberg (Philadelphia: University of Pennsylvania Press, 1979).

superfluous and hampered general practitioners' abilities. Both authors, however, admit that science, disputed or not, occupied a central role in the modernization of medicine. Indeed, the historiography, along with present-day observations, points toward the essential place science has held and continues to hold in modern medicine. W. F. Bynum recognizes historians who have studied science's contested position in nineteenth-century medicine by proposing varied usages and understandings of scientific work by physicians, but the crux of his argument—that modern medicine emerged between 1800 and 1918—relies on science being “one of the important influences shaping the structure of medicine in the nineteenth century.”<sup>7</sup>

If scientization is one of the most important characteristics of modern medicine, its influence has been understood by most historians to have been established almost exclusively by doctors and scientists. Charles E. Rosenberg's contribution to *The Therapeutic Revolution*, in contrast, gives equal weight to consumers of medicine, whose participation in the doctor-patient relationship is just as important as their physicians'. He likens the task of comprehending historical therapeutics (and changes within them) to the practice of cultural anthropology, in which medical meaning is understood only within the context of the culture—lay and professional—in which it exists. Because the patient must necessarily play a role in the practice of healing, some sort of framework for a common understanding between him or her and their doctor must be present. “The key to understanding therapeutics... [in] the nineteenth century,” he argues, “lies in seeing it as part of a system of belief and behavior participated in by

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<sup>7</sup> W. F. Bynum, *Science and the Practice of Medicine in the Nineteenth Century* (Cambridge: Cambridge University Press, 1994), xii.

physician and laymen alike.”<sup>8</sup> This approach encourages equal consideration of the way that the everyday man or woman would have understood their health and what the appropriate course of action would have been when it failed them, but Rosenberg includes very few scientific actors in his study. He is less interested in the role that scientific discourse played in the doctor-patient relationship and more in the fact that the exchange between physician and patient was and continues to be a reciprocal one.

More recent work in the same vein includes Nancy Tomes’s *The Gospel of Germs*, a sustained attempt at elucidating the ways in which germ theory, developed by scientists and disseminated through private and public health officials as well as through advertisements for products claiming to kill germs, affected the everyday lives of Americans. She argues that even before physicians had ubiquitously accepted the germ theory of disease, vernacular audiences were interpreting its tenets and integrating them into their lives. They did not do so in absolute ways, however, often molding the idea of the microbe into already well-established understandings of disease and disease prevention. Like Rosenberg’s, Tomes’s methods give credence to actors often absent from histories of science and, to a lesser extent, medicine. “Instead of treating popular views as merely pale, distorted images of the ‘real’ knowledge generated by ‘real’ scientists,” she contends that her approach, “allows for ideas to travel in more than one direction,” revealing a more nuanced and accurate depiction of how knowledge is created and experienced.<sup>9</sup>

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<sup>8</sup> Charles E. Rosenberg, “The Therapeutic Revolution: Medicine, Meaning, and Social Change in Nineteenth-Century America,” in *The Therapeutic Revolution* (Philadelphia: University of Pennsylvania Press, 1979), 5.

<sup>9</sup> Nancy Tomes, *The Gospel of Germs: Men, Women, and the Microbe in American Life* (Cambridge: Harvard University Press, 1998), 13-14.

It is this strategy that I bring to bear on the construction of medical meanings in Eureka Springs, which I argue were developed collectively by several groups of participants. My work looks at the intersection of coexisting and co-creating medical, and more specifically, therapeutic discourses: that of the layperson, of the physician, and of the scientist. In a very real sense, however, especially as concerns what I have termed variously “laypeople,” the “vernacular” participants, and “everyday health-seekers,” these categories did not necessarily exist for the people that I study. Historical actors cannot be placed neatly into essentialized categories and expected to believe and behave only within these bounds. I find, however, that upon stepping back and employing methods of analysis developed by Michel Foucault, it is possible to locate patterns of knowing and acting that seem to characterize the somewhat distinct discursive formations characteristic of the three groups.<sup>10</sup>

Doctors are the mostly clearly distinguishable of the three categories of knowledge producers. In this study, they are characterized by specialized training (often though not always in medical schools), adherence to and participation in a larger, relatively well organized and ubiquitously recognized profession, and the use of a technical, esoteric language (which may or may not be comprehensible to an outsider). Their discursive contributions include the formation of journals and medical societies, the writing they produced within those organizations as well as that which was generated for promotional materials, their running of practices and treating of patients within the town, their participation in civic and political life, and their activities in the wider context of their field. Their discursive activities worked on a local and national

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<sup>10</sup> Michel Foucault, *The Archaeology of Knowledge and the Discourse on Language* trans. A. M. Sheridan Smith (New York: Vintage Books, 1972).



scale as they acted as arbiters between distinctly Arkansan health concerns and those of the nation (as understood from the mostly eastern medical powerhouses). They generally operated out of their private practices, but some also held positions at medical schools. It is worth noting, however, that most American medical schools during this period were proprietary and could not have sustained any sort of research program. Most medical professors, in fact, continued to practice outside of class to supplement their meager incomes from teaching.<sup>11</sup>

Scientists had a less tangible existence during the time period I am studying, in part because university-based American science only really began to develop in the last couple of decades of the nineteenth century (and then primarily on the east coast), because the lack of landed gentry meant that the independently wealthy gentleman-scientist characteristic of the eighteenth- and nineteenth-century European intellectual landscape was absent, and because “science” is such an incredibly broad term.<sup>12</sup> I am using it here to mean someone engaging in experimentation, often quantified, who is also part of a community set off by adherence to a definite, articulated set of methods and theories (though these methods can be contested as long as members of the community are still able to communicate with one another). This thesis will focus on just two disciplines—chemistry and (medico)climatology—both of which were in the

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<sup>11</sup> Paul Starr, *The Social Transformation of American Medicine: The rise of a sovereign profession and the making of a vast industry* (New York: Basic Books, 1982), 40-44.

<sup>12</sup> For more on American science and its distinct development, see Georgina M. Montgomery, Mark A. Largent, eds. *A companion to the history of American science* (Hoboken: Wiley, 2015); “Historical Writing on American Science,” W. Patrick McCray and Suman Seth eds. special edition *Osiris* 1, no. 1 (1985); Nathan Reingold, *Science, American Style* (New Brunswick: Rutgers University Press, 1991).

process of developing a degree of professional distinction throughout the period of my study.

Though the training required to enter either scientific discipline would no doubt have included the attainment of a college degree, I have been unable to uncover how the chemists who played important roles in Eureka's story were educated. Climatologists were generally scientifically-inclined doctors trained at medical schools. As such, their discursive work is sometimes difficult (if not impossible) to disentangle from that of medical practitioners. The groups differ, however, in important discursive aspects; as chapter two will show, climatologists forged exclusive organizations, held meetings specifically concerned with the development and dissemination of climatological knowledge, and engaged in distinctly scientific exercises in their attempts at formulating a comprehensive data-driven medico-topography. Chemists likewise had unique knowledge-creating methods and structures, contributing to their own discipline-specific journals, engaging in debates unique to their field, and running meticulous, complicated tests that often require specialized equipment. They also established a uniquely chemical societal presence based on their abilities to produce knowledge, forging business connections with both private and public groups interested in utilizing their skill set.

Both disciplines are also distinguished by their use of technical languages, but chemistry's was particularly field specific. Minerals and elements were named according to set standards and charts were organized with chemists' conventions in mind. Lastly, the two disciplines both enjoyed a place in the academy from which to produce knowledge (climatology in a much more limited sense), but not all members of

their communities did so. Chemists, especially as the nineteenth century wore on, began to operate from a wide array of locations, finding and creating space for their increasingly authoritative discursive work. Medico-climatology, on the other hand, was primarily practiced by physicians, most of whom were interested in putting their town on the therapeutic map. Most of its discourse, then, was produced on-site, much like that of the physician.

Vernacular participants in the story of the springs are harder to identify, in no small part because they were far from a homogenous group. Tomes mitigates the obvious problems with essentializing an enormous, discordant mass of people by acknowledging their individuality (even amongst members of the same gender, class and/or social and ethnic group) and by offsetting generalizations with detailed case studies. Even then, she admits that certain determinants of belief and behavior are difficult for the historian to judge, and as such they remain outside of her purview.<sup>13</sup> This I will try to do, but like Tomes, I concede that some aspects of the everyday experience and understanding are inaccessible to the historian. Through the use of a wide range of sources, however, I hope to give at least a rough view of their discursive contributions to the springs' medical meanings.

I understand laypeople to be those without the credentials (be they schooling and/or professional recognition) that give the other two groups a claim to knowledge-based, "objective" discursive contributions to the medical meanings of Eureka Springs. This group, then, includes most of the springs' publicists as well as a majority of the tourists they attracted. While this may at first seem problematic due to conflicting

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<sup>13</sup> Tomes, *The Gospel of Germs*, 20.

motivations, I believe that marketers and visitors by and large adhered to the same medical discourse and thus understood and created similar meanings around the springs' healthfulness. Equally important is the fact that many who settled in the town and thus joined the ranks of its advocates did so after visiting it as an invalid, often adding narratives first constructed during their tenures as health-seekers to the ones speaking to and bringing in new clientele. Some—especially those involved with Powell Clayton—did see the springs as more of an investment opportunity that successful advertising would secure, but this does not render their contributions any less valuable to the historian trying to understand constructions of health. Regardless of their motivations, even entrepreneurs who created no *personally* meaningful narratives of health around the springs were playing off of and into a distinctive vernacular medical discourse when they wrote advertising copy and chose images they thought would appeal to their audience.

I see vernacular participants as both producers and consumers of the springs' health-giving properties while acknowledging their variety and the difficulty that comes with trying to essentialize it. Their presence was not systematically recorded, and when it was, it was not often accompanied by much information beyond their names, hometowns, and sometimes their illnesses. What is left of their experiences and understandings of them is impalpable, sprinkled in a wide variety of places. I can say a few general things about them, though: most would not have had specialized training in science or medicine, distinguishing their written and linguistic contributions to the springs' medicinal discourse from the other two groups; a vast majority were American, and after the town's first few years, many came from the northern-midwest (Indiana,

Illinois, Iowa, and Missouri); most (again, after the first few years) were from larger cities like Chicago, Little Rock, St. Louis, and Louisville; and all whose voices I have been able to find in any substantive capacity as regards the construction of knowledge around the springs were white.

This last condition certainly does not mean that African and Native Americans who lived in and visited Eureka Springs in this period did not contribute in meaningful ways to medical narratives. What it does point toward, as historian Jacqueline Froelich has argued and proven in poignant detail for the springs' once thriving African American community, is that the town has a history of extreme racial discrimination and even racially motivated violence that it has yet to fully acknowledge.<sup>14</sup>

Unfortunately, this makes locating source material exceedingly difficult, and I have opted to restrict my study accordingly. It is my hope that future work will shed light on the discursive contributions of actors absent from the archive.

Vernacular experience and belief even in the absence of racial obstacles can be difficult for the historian to access. In order to do so, I have consulted some rather unconventional sources including advertisements (in the form of pamphlets, booklets, and newspaper articles), testimonials, photographs, blurbs from newspapers, and other ephemera. Because they are difficult to substantiate, to pin down to one person or group at a particular time with a clearly distinguishable motivation, they leave room for more interpretation than some more traditional sources. When possible, I have tried to provide corroborating evidence from other places in order to bolster their transparency.

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<sup>14</sup> Jacqueline Froelich, "Eureka Springs in Black and White: The Lost History of an African-American Neighborhood," *The Arkansas Historical Quarterly* 56, no. 2 (1997): 158-179.

Testimonials, probably the most dubious location from which I draw lay voices due to the strong motivation publicists had to provide positive reports of the springs' capabilities, can often be corroborated by portions of local newspapers devoted to reporting on citizens' activities, including their travelling plans. I have found it to be the case that when I can find them, the dates on the testimonials and the visitors' local newspapers generally line up. This, combined with the fact that most endorsements include specific addresses to which the potential customer was encouraged to write, points toward at least some of them being authentic.

Despite the distinctions I have made in the interest of organizing a vast and widely varying cluster of information into a cohesive narrative, I find, as does Foucault, that it is in the relationship between these categories, in the blurry overlapping of them, that the real story is told. I find that laypeople appropriated physicians' frameworks for understanding their illnesses just as doctors, existing as they did within the same social milieu as their patients, tapped into much older and more ubiquitous narratives of disease in order to explain its existence and prescribe remedies for it. Medical practitioners and laypeople both employed scientific knowledge and jargon in forming or substantiating already held medical beliefs, and scientists' work was often driven by medical inquiry and public wants and needs. The discourses of science, medicine, and layperson thus challenged, created, and nuanced one another, coevolving sometimes alongside, sometimes at odds with, and sometimes within each other. It is in the transfer of language, methods, and behaviors from one discursive formation to another that the complex ways in which knowledge was created and experienced is revealed.

Eureka Springs, a town sustained by the knowledge created around the healthfulness of its climate and springwater during a time of therapeutic uncertainty, offers a chance to understand not only how science came to occupy such a significant space in modern medicine, but such a study also provides insight into how mass, complex medical meanings are jointly created, from the top down *and* from the bottom up, by participants with no specialized knowledge just as they are constructed by the traditional purveyors of medical doctrine—scientists and physicians.

## Chapter One: “The ‘wonderful something’ in the waters.”<sup>15</sup>

A guidebook published in 1885 in St. Louis, Missouri, describes a “remarkable” place, home to some of “the grandest works of Nature” situated just south of the border in Arkansas. The author asserts that the location was revered by Native Americans and Spaniards alike, and that it has in the past five years been greatly improved for the comfort and convenience of health-seekers from both north and south. The locale’s most striking attribute, however, is not its scenery, history, or rapidly expanding tourist economy; it is the medicinal qualities of the water gushing from forty-two natural springs that dot its rugged, elevated landscape. The booklet contains several tables displaying climatic data and chemical analyses of the water, but it does not employ them in its explanation for the waters’ efficacy. On the contrary, the author and several correspondents assert that neither “the chemist’s laboratory” nor the climate (temperate and pure though it is) can account for the cures daily witnessed at the springs. Instead, the weight of the evidence is contained within a section devoted to testimonials, most of which detail the failure of “the best medical talent” in their home state and a miraculous recovery, “a saved life,” amongst similarly plagued individuals, following just a few weeks drinking and bathing at “the modern Siloam.”<sup>16</sup>

This sort of exceptional language and qualitative evidentiary support is characteristic of the many early booklets, pamphlets, and newspaper articles that drew attention to the fledgling municipality of Eureka Springs, Arkansas, in the early- to mid-

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<sup>15</sup> “Over the State.” *Daily Arkansas Gazette* (Little Rock, Arkansas), April 28, 1881.

<sup>16</sup> W. W. Johnston, *The Eureka Springs Arkansas* (St. Louis: Woodward and Tiernan, Engravers, Printers, & Binders, 1885). Special Collections, University of Arkansas Libraries, Fayetteville.



1880s. Its initial appeal lay in the alternative it offered to mainstream medical therapeutics, about which recent scientific developments across the Atlantic had raised significant doubt. Concerns with the inability of science or medicine to provide effective remedies for age-old ailments along with the new illnesses of urbanization made the remote town an attractive option for health-seekers. Acutely aware of this, the architects of the springs' unique brand of healthfulness capitalized on the disillusionment and plurality that characterized American medical discourse at the time of Eureka's founding. Consisting primarily of publicists and patients, these vernacular craftsmen placed an appealing distance between the town's unique brand of hydrotherapy and mainstream medicine and the science that struggled to substantiate it.

Eureka Springs was founded in 1879 after Judge L. B. Saunders of Berryville, Arkansas, hearing rumors of a spring with healing capabilities near his hometown and suffering from a stubborn sore on his leg, sought it out and made camp in early May. When it healed his affliction, he spread the word far and wide; by July, there were over twenty families camped there, and they settled on the name "Eureka Springs" for their new home.<sup>17</sup> The town grew astonishingly quickly in its first few years, as L. J. Kalklosch, its first historian, attests; the fall saw the construction of more permanent residential structures, a boarding house, bath house, grocery, post-office, and the

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<sup>17</sup> This story appears, with slight variations, in every history of the town. Cora Pinkley-Call, the town's main local historian in the early twentieth century, claims that her parents were friends of Judge Saunders and were present at the town's naming. A newspaper article in *The St. Louis Globe* relates the story in 1880, so although I have no doubt that the tale is exaggerated, it appears to be at least somewhat fact-based. See Cora Pinkley-Call, *Stair-Step-Town* (Little Rock: Jenkins Enterprises, 1952), 14-17; June Westphal and Catherine Osterhage, *A Fame Not Easily Forgotten: An Autobiography of Eureka Springs* (Cassville: Litho Printers & Bindery, 2010), 1-3; F. B. Bell, "Eureka Springs." *St. Louis Globe-Democrat* (St. Louis, Missouri), June 14, 1880.

election of a town council. A Galveston, Texas newspaper reported the town's population in April of 1880 to be 5,000.<sup>18</sup> The federal census of 1880 (taken in June of that year) seems to substantiate this claim, listing Eureka Springs, Carroll County, as home to 4,020 individuals.<sup>19</sup>

This rapid influx of people seems remarkable, particularly when considering the location of the town and its limited amenities. Even today, the hopeful tourist must endure an hour of dangerously curvy roads before gaining access to the city. In the days of its most prolific growth, Eureka Springs was not connected to Arkansas and Missouri's developing system of railroads, and the closest stations were to the southwest in Little Rock, an eighty-five mile, twenty-four hour journey by stagecoach, or, beginning in January of 1881, to the north in Seligman, Missouri, an eighteen mile, four-hour carriage ride.<sup>20</sup> This made it difficult for general and grocery store owners to provide anything other than basic necessities, as Nellie Mills, an early settler, remembers: "Few things but staples such as salt, sugar, soap, dried fish, canned salmon and sardines, matches, kerosene (necessary for lights), flour, meal, tea and coffee, and such products were always to be obtained."<sup>21</sup> What is more, upon arrival, the weary

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<sup>18</sup> L. J. Kalklosch, *The Healing Fountain: Historical, Descriptive, and Illustrative* (St. Louis: Chamber's Print, 1881), 9-10. Special Collections, University of Arkansas Libraries, Fayetteville.; "Eureka Springs." *Galveston Daily News* (Houston, Texas), April 23, 1880.

<sup>19</sup> Populations for tourist towns are particularly hard to pin down due to the constant influx and exodus of individuals. The larger figure was probably more realistic during tourist season, as will be discussed below. *U. S. Federal Population Census, 1880*. (NARA microfilm publication Series T9). Records of the Bureau of the Census, Record Group 29. National Archives, Washington, D. C.

<sup>20</sup> Kalklosch, *The Healing Fountain*, 41.

<sup>21</sup> Nellie Alice Mills, *Early Days at Eureka Springs, 1880-1892* (Monnett: Free Will Baptist Gem, 1949), 18. Special Collections, University of Arkansas Libraries, Fayetteville.

traveler could not have necessarily expected a warm, comfortable bed. Even early promotional material owned up to the rough-and-tumble accommodations initially available, warning “those who seek health there... to adapt themselves according to the situation.”<sup>22</sup> The journey to the springs was truly a pilgrimage for its early disciples, many of whom were desperately ill.

### **A Crisis in Medicine: Mistrust and Fracture**

What drew so many in such a short time can only be understood within the context of the desperate position of nineteenth-century medicine. Roy Porter has described it as having been characterized by, “[t]oo many worthless medicines, too few remedies, opinionated patients, insecure doctors and ignorance everywhere,” which “made for a dismal situation.”<sup>23</sup> Indeed, a crisis was underway as one medical paradigm replaced another. Humoral medical theory, which had more or less been the working theoretical framework of physicians since antiquity, encouraged a holistic perception of disease causation and cessation. According to its tenets, illness of whatever type was caused by bodily imbalance and health could be restored only through the reinstatement of equilibrium. This was generally accomplished through the use of purgatives, emetics, and the letting of blood which, by instigating the evacuation of excess humors, would restore the body’s balance and thus a state of health. Though the language of equivalence had changed from four humors to a spectrum of depletion/excitation, eighteenth- and nineteenth-century doctors espoused similar ways of restoring bodily harmony. Specificity in treatment was rare.

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<sup>22</sup> “Letter from St. Louis. Special Correspondence of the News.” *The Galveston Daily News* (Houston, Texas), June 4, 1880.

<sup>23</sup> Roy Porter, *The Greatest Benefit to Mankind: A Medical History of Humanity* (New York: W. W. Norton & Company, 1997), 675.

Late eighteenth-century America saw the proliferation of a particularly extreme form of this kind of therapy when one of its most influential physicians advocated violent and combative methods for almost all diseases in nearly every patient. Benjamin Rush was a professor from 1769 until his death in 1813 at the University of Pennsylvania, which means that he taught a significant number of America's most well-educated physicians of the early nineteenth century.<sup>24</sup> Believing that the body contained 25-28 pounds of blood (nearly twice the actual amount) and that patients could stand to lose four-fifths of it, Rush pressed for venesection on an unprecedented scale.<sup>25</sup>

### *European Science and American Therapeutic Nihilism*

Contrast Rush's violently confident therapeutics with medical developments filtering in from across the Atlantic in the first third of the nineteenth century and Porter's estimation of the medical situation becomes justifiable. In Paris's Hotel Dieu, Pierre Louis and his students utilized the massive amounts of "clinical material"—sick individuals too poor to afford individualized care—to run proto-clinical trials in order to determine disease patterns and the health outcomes of traditional therapeutics. One of his studies, which was quickly translated into English and published in the *American Journal of the Medical Sciences*, proved convincingly that bloodletting, even more important in mainstream American medical therapeutics than it was on the Continent,

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<sup>24</sup> David Ramsay, a colleague of Rush's, estimated that he taught roughly 2,250 students throughout his life. See Ramsay, *An Eulogium upon Benjamin Rush, M.D. Professor of the Institutes and Practice of Medicine and of Clinical Practice in the University of Pennsylvania...* (Philadelphia: Bradford & Inskeep, 1813), 26.

<sup>25</sup> For more on Rush, his therapeutics, and their influence see Paul E. Kopperman, "'Venerate the Lancet': Benjamin Rush's Yellow Fever Therapy in Context," *Bulletin of the History of Medicine* 78, no. 3 (2004): 539-574.

had very little effect on survival rates in pneumonia.<sup>26</sup> As John Harley Warner and Michel Foucault have both asserted, this was not the only radical change in medical thinking that emerged from Paris's clinics; an emphasis on correlating symptoms with visible lesions on bodies encouraged an increasingly precise nosology of disease, an idea in direct conflict with balance-oriented conceptions of disease.<sup>27</sup> Coupled with developments in the novel science of bacteriology, whose major figures were discovering microorganismal culprits behind some of the most prevalent and deadly diseases in the 1880s, the humoral understanding of health was rapidly losing discursive power. And while these advancements looked promising to some of those constructing a new, more "enlightened" theoretical basis for medicine, the harsh reality of the crisis was felt by those forced to contend with its therapeutic implications.

It is clear that this information made it across the Atlantic ocean in journals, correspondence, and through American medical students sent to train in what were understood to be the European medical powerhouses of the nineteenth century—one of which was Paris.<sup>28</sup> Though many American medical men had reservations about the conclusions being drawn by European researchers, they took heed; as a study by Warner shows, the use of emetics, purgatives, and bloodletting gradually decreased at the

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<sup>26</sup> Alfred Jay Bollet, "Pierre Louis: The numerical method and the foundation of quantitative medicine," *American journal of the medical sciences* 266, no. 2 (1973), 96-99.

<sup>27</sup> Michel Foucault, *The Birth of the Clinic: An Archaeology of Medical Perception* trans. A. M. Sheridan Smith (New York: Vintage Books, 1994); John Harley Warner, "Therapeutic Change," in *The Therapeutic Perspective: Medical Practice, Knowledge, and Identity in America, 1820-1885*, 83-161 (Princeton: Princeton University Press, 1986), especially 86-87.

<sup>28</sup> To see one example of this process, see Linda G. Kahn and Alfredo Morabia, "Using the numerical method in 1836, James Jackson bridged French therapeutic epistemology and American medical pragmatism," *Journal of Clinical Epidemiology* 68, no. 4 (2015): 397-404.

Massachusetts General Hospital in Boston between the years of 1820 and 1880 from usage in almost 60% of cases to roughly 5%.<sup>29</sup> Thus by mid-century, even if they were not training abroad, many American doctors were being exposed and reacting to the disquieting notion that they had very little to offer their patients outside of an increasingly sophisticated diagnosis.<sup>30</sup> Rather than unifying and strengthening therapeutic practice, nineteenth-century scientific endeavors were proving it ill-conceived and ineffective, and they were offering up scant alternatives.

A sense of therapeutic nihilism had reached many physicians, which often manifested itself in an emphasis on disease prevention. If the sickness could not be stopped once it took hold, it must be prevented from ever occurring in the first place. This was the case even in Arkansas, whose own doctors identified themselves as existing on the periphery of professional medicine.<sup>31</sup> In a report on pneumonia from 1878 in the *Transactions of the Arkansas State Medical Society*, Dr. J. S. Shibley of

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<sup>29</sup> John Harley Warner, "From Specificity to Universalism in Medical Therapeutics," in *Sickness and Health in America: Readings in the History of Medicine and Public Health* eds. Judith Walzer Leavitt and Ronald R. Numbers (Madison: University of Wisconsin Press, 1978), 91.

<sup>30</sup> Though this assertion certainly does not hold true in every case, it seems to be the general trend, even in the context of southern medical education. For more on the Parisian clinical and pathological anatomical school and therapeutic nihilism, see "To Become a Doctor," in Patricia Spain Ward, *Simon Baruch: Rebel in the Ranks of Medicine, 1840-1921* (Tuscaloosa: The University of Alabama Press, 1994); Paul Starr, "Medicine in a Democratic Culture, 1760-1850," 30-59 in *The Social Transformation of American Medicine* (New York: Basic Books, 1982); and Roy Porter, *The Greatest Benefit to Mankind*, 312-314.

<sup>31</sup> The transactions of the medical society are full of juxtapositions between the level of cohesion and recognition sought out and experienced by Arkansas's doctors and that of medical professionals in surrounding states and at the national level. A report compiled by the society's delegates to the 1879 meeting of the AMA congratulates its authors on their meaningful contributions to the conference, especially considering their "isolation," both geographic and intellectual, resulting from their practice in Arkansas. "Report of the Chairman of the Delegation," *Transactions of the State Medical Society of Arkansas at its Fourth Annual Session* (Little Rock: Blocher & Mitchell, 1879), 42.

Roseville, Arkansas claims that the alarming number of deaths from the malady are the result of doctors, led by “false theories,” adopting purgative methods in an ill-conceived effort to combat the inflammatory process.<sup>32</sup> This indicates an awareness of the criticism of Rush’s therapeutics, in which inflammation was brought under control by bloodletting. Shibley does not, however, provide much of an alternative. He recommends very little beyond keeping the patient well-fed by way of actively combatting the illness.

Indeed, physicians were not the only ones cognizant of and reacting to regular medicine’s therapeutic incompetency. A novel written by Marcus Lafayette Byrn, pen name David Rattlehead, in 1851 proves that if doctors in Arkansas were admitting therapeutic defeat in the 1870s, their patients felt shortchanged much earlier. Byrn, a practicing doctor who supplemented his income as an author, had received much of his pre-university medical training in Arkansas. *The Life and Adventures of an Arkansaw Doctor* is a fictionalized account of his early life. It was meant for popular audiences and seems to have been at least somewhat successful, as Byrn went on to publish three more books featuring Dr. Rattlehead’s (mis)adventures.<sup>33</sup>

In the novel, Dr. Rattlehead constantly places the men and women who seek out his services in danger due to his self-acknowledged ineptitude. Overconfident in his abilities, he almost bleeds a young woman to death in the ninth chapter when he slices her arm open and cannot stem the flow. In another “scrape,” he gives an injured boy a

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<sup>32</sup> “Clinical Study in Etiology of Pneumonia,” *Transactions of the State Medical Society of Arkansas at its Fourth Annual Session* (Little Rock: Blocher & Mitchell, 1879), 61-62.

<sup>33</sup> James R. Masterson, “Arkansaw Doctor,” *Annals of Medical History* 3, no. 2 (1940), 42.

half teaspoon of croton oil before remembering that one or two drops was the general dose. Both patients narrowly survive their encounters with the bumbling doctor (lest the humor may have been lost, having come a bit too close to the reality on which it relies). In both cases his charges express a discerning hesitancy before following Rattlehead's prescriptions or allowing him to perform a procedure, but his ability to appear knowledgeable—through technical talk and use of drugs, references to his studies and reading of medical books, and the dramatized handling of specialized equipment—assuages their fears.<sup>34</sup> As Conevery Bolton Valenčius has asserted, much of Byrn's satirical humor relies on widely relatable professional, gendered, and racialized stereotypes.<sup>35</sup> Through the caricature of the ineffectual, brash, and deceptive doctor, Byrn plays off of just as he contributes to vernacular medical discourse, which his work proves must have been pessimistic indeed in regards to mainstream medicine's virtue.

### **An Invalid's Last Hope**

It is not surprising, then, given its relative ubiquity by the time Eureka Springs's patrons and promoters began to engage in medical meaning-making around the town, that the sentiment of distrust in traditional therapeutics and by extension its stewards featured prominently in early promotional material. A resentment toward regular medicine is clear in the testimonials that make up large parts of Eureka Springs's early advertisements, which suggests that it may have been one of the reasons many health-

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<sup>34</sup> David Rattlehead, "Bloodshed and Hysterics," and "Aqua Fortis, Croton Oil, or Taking the Wrong Medicine," in *The Life and Adventures of an Arkansaw Doctor* ed. W. K. McNeil (Fayetteville: University of Arkansas Press, 1989).

<sup>35</sup> Conevery Bolton Valenčius, *The Health of the Country: How American Settlers Understood Themselves and Their Land* (New York: Basic Books, 2002), 175.



seekers made the trip. Poindexter Dunn wrote in to Eureka Springs on April 18, 1883, detailing his experience as an invalid there:

I went to Eureka Springs in September, 1880, suffering greatly with dyspepsia and nervous depression. I had the services of the best physicians in the country, and the mineral waters of Virginia, without any benefit. After a stay at Eureka Springs for three months I was restored to health. I drank about three quarts of water daily from the Basin and Hardin [*sic*] Springs.<sup>36</sup>

Though this is not the case for every testimonial included in information booklets about the town, Dunn's can be supplemented with outside documentation that seems to point toward its authenticity. A newspaper article from the *Daily Arkansas Gazette* dated October 28, 1880, heralds the "restoration of the gentleman's health" and his presumed return to his duties as a statesman in the near future.<sup>37</sup> In any case, the narrative structure is very similar to those that surround it and indicative of a lack of faith in the capabilities of the medical profession to heal. "The best physicians in the country" could do nothing for Dunn's ailment. It is impossible to say with certainty whether Dunn came to Eureka Springs after it was recommended he do so by a physician in his hometown, but it seems unlikely. His testimonial, like most others in early promotional booklets, makes no mention of a doctor's involvement in his decision to put the springs' narrative of salubrity to the test, referring instead to his/her failure as the impetus for his health travels.

Early promoters were sometimes equally critical of the medical profession, lambasting its inadequacy and unwillingness to condone health travel to places like Eureka Springs. A particularly vicious example comes from Charles Cutter, a prolific manufacturer of health travel literature, who wrote and published a booklet on Eureka

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<sup>36</sup> Johnston, *The Eureka Springs of Arkansas* (1885), 44.

<sup>37</sup> "Col. Poindexter Dunn." *Daily Arkansas Gazette* (Little Rock, AR), October 28, 1880.

Springs in 1884.<sup>38</sup> He alleges that although a visit to the springs has been shown to cure an extensive array of ailments, many physicians “will not and do not” send their more stubborn cases to known health spots. He condemns them as faithless, ignorant, or “criminally neglectful,” going so far as to find them “disgraceful” and “unworthy of [the] confidence” bestowed upon them by their patients. He urges the unsatisfied invalid to ask his or her physician if they feel a trip to the springs might be of benefit, and in the event that the answer is no, Cutter advises his readers to employ their own judgment, doctors be damned.<sup>39</sup> Accusations like Cutter’s in conjunction with the negative evidence in testimonials suggest that the early medical meanings constructed at the springs were informed by a primarily vernacular audience’s disillusionment with mainstream medicine’s therapeutic shortfalls.

### *Medical (De)regulation and Pluralism in Arkansas*

Perhaps as a result of this widespread dissatisfaction with mainstream medicine and the authoritative space it granted laypeople in medical discourses, state involvement in the policing of medical practice was scarce for much of the nineteenth century. Indeed, the trends correspond temporally; medical regulations fell out of favor in the

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<sup>38</sup> Charles Cutter and later his son John Milton Cutter had reason to take interest in the success of health tourist spots, seeing as they produced informative, promotional, and souvenir booklets on a number of them. See Cutter, *Cutter’s Guide to the Hot Springs of Arkansas* (St. Louis: Slawson, 1883); Cutter, *Cutter’s guide to Mt. Clemens* (Mt. Clemens: C. Cutter, 1873); Cutter, *The Hot Springs as they are: a history and guide* (Little Rock: W. H. Windsor, Book and Job Printer, 1874); Cutter, *Cutter’s guide to Mineral Wells, the great health resort of Texas: illustrated* (n.p., 1893); Cutter and Cutter, *Cutter’s official guide to Hot Springs, Arkansas* (n.p.: Chas. Cutter & Son, 1917); and Cutter, *Cutter’s souvenir of Hot Springs, Arkansas* (Hot Springs: Chas. Cutter & Son, 1904).

<sup>39</sup> Charles Cutter, *Cutter’s Guide to the Eureka Springs of Arkansas* (St. Louis: Cutter and Trump, 1884), 19-21. Special Collections, University of Arkansas Libraries, Fayetteville.

1820s and 30s and did not re-emerge until as late as the early twentieth century in some states—Arkansas included.<sup>40</sup> A bill outlining the licensure and regulation of medical practice in the state was vetoed by Governor John Pope in 1831, one of the reasons stated being that the costs and standards would prohibit doctors from practicing in a state too destitute to be overly demanding of its medical men. The demands by Arkansas's regular physicians for state involvement in medical regulation were subsequently ignored until 1881, when a law was passed outlining some vague regulatory infrastructure. It was woefully inadequate by the state medical society's standards, however, and squabbling continued throughout the 1890s with little headway. It was not until 1903 that the legislature finally established a formal licensing system when it adopted Act 178. The law required potential practitioners to undergo examinations, and a 1909 update stipulated that licensees must have graduated from a medical school.<sup>41</sup>

This, coupled with the general dissatisfaction with mainstream therapeutics, made room for what Roy Porter has termed the “lively medical pluralism” that would dominate the healthcare market for the rest of the nineteenth century.<sup>42</sup> In this space, a plethora of medical sects emerged, each suggesting a unique and absolute solution to regular medicine's obvious issues. They made a case for their medical authority by playing off of and bolstering a discourse of mainstream medicine's inadequacy. They

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<sup>40</sup> For more on this phenomenon outside of Arkansas, see Starr, “Medicine in a Democratic Culture, 1760-1850,” *The Social Transformation of American Medicine*, 30-59 (New York: Basic Books, 1982).

<sup>41</sup> David M. Moyers, “From Quackery to Qualification: Arkansas Medical and Drug Legislation, 1881-1909,” *The Arkansas Historical Quarterly* 35, no. 1 (1976), 4-15.

<sup>42</sup> Roy Porter, *Quacks: Fakers & Charlatans in English Medicine* (Charleston: Tempus Books, 2000), 33.

included, among others, homeopathy, Thomsonianism, osteopathy, botanical medicine, eclecticism, and, most importantly for Eureka Springs's future, hydropathy. Their success in Arkansas is demonstrated by the fact that even the 1909 edition of Act 178 included provisions for four separate boards of examination: the Medical Board of the Arkansas Medical Society, the Eclectic Medical Board, the Homeopathic Medical Board, and the Osteopathic Examining Board.<sup>43</sup> This ensured that sectarians of recognized schools could be licensed alongside their regular contemporaries, speaking to their clout and significant presence in the state and also to the weakened status of regular practitioners.

#### *Hydropathy, Hydrotherapy, and Therapeutic Community*

Revamped by Austrian Vincent Priessnitz after decades of relative obscurity, hydropathy's heyday in America began in the 1840s through its promotion by several disillusioned graduates of American medical schools. Historians who have written on the movement have for the most part localized their studies to its manifestations on the east coast, neglecting its influence on later health movements.<sup>44</sup> Indeed, Jane B. Donegan has held its decline to have taken place in the years following the Civil War, largely because she restricted her study to New York.<sup>45</sup> I contend that some of its core tenets continued to hold sway in the first decade of Eureka Springs's existence,

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<sup>43</sup> Moyers, "From Quackery to Qualification," 13.

<sup>44</sup> Susan E. Cayleff, *Wash and Be Healed: The Water Cure Movement and Women's Health* (Philadelphia: Temple University Press, 1991). An exception is Harry B. Weiss and Howard Kemble's *The Great American Water-Cure Craze: A History of Hydropathy in the United States*, (Trenton: The Past Times Press, 1967). Though the narrative is centered around east coast practitioners and their schools and sanatoriums, the "Appendix" is a state-by-state breakdown of hydropathic activity. Noticeably absent, however, is Arkansas.

<sup>45</sup> Jane B. Donegan, *"Hydropathic Highway to Health": Women and Water-Cure in Antebellum America*, (New York: Greenwood Press, 1986), 195.

although Harry Weiss and Howard Kemble's distinction between hydropathy and hydrotherapy is helpful in understanding the altered form the crusade took on in the late nineteenth century.

Weiss and Kemble have argued that hydropathy, in its earliest and most radical years, was characterized by strict adherence to routines (often involving copious exercise and various kinds of baths at strange hours), abstinence from stimulating food/drink, the exclusion of therapeutic drug use, and a vehement opposition to mainstream medicine. In contrast, they have understood hydrotherapy to have been less radical; most proponents were not only hydrotherapists, and they did not espouse a therapeutic strategy that relied exclusively on water. There was also more of an effort put forth by its main practitioners to provide a scientific foundation for the water's efficacy and less of a tendency to denounce mainstream medicine. Instead, many of these men published in standard medical journals and associated with regular physicians.<sup>46</sup>

In Eureka Springs's early years, a curious mix of hydropathy and hydrotherapy seems to have been present, indicating that the town was constructing the initial medical meanings around its springs during a transitional time for Weiss and Kemble's differential terms and for sectarian medicine. While certain aspects of the discourse developed around hydropathy remained appealing—the condemnation of traditional medicine, the veneration of water as a healing agent—others, if they were not absent altogether, had lost their appeal. Strict routines were not characteristic of a stay at the springs, and neither were the more elaborate kinds of baths and wraps that had

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<sup>46</sup> Weiss and Kemble, *The Great American Water-Cure Craze*, 55-56.

previously been integral to the success of the water cure. Completely absent, however, was any sort of effort to explain the springs' healthfulness through the use of scientific language.

In any case, it is clear that whether termed “hydropathic” or “hydrotherapeutic,” the influence of Priessnitz’s therapeutics was felt in Eureka Springs. Along with a general lack of respect for mainstream therapeutics, hydropathists encouraged the drinking of voracious amounts of water, bathing at the very least once daily, getting plenty of outdoor exercise, and doing all of this under the direction of a qualified practitioner. Many of the testimonials from the springs make mention of drinking specific quantities of water—“three quarts... daily,” in Dunn’s case—and some also indicate that they did so under the auspices of a physician. Miss Emma Simpkins of St. Louis was one such visitor who, upon her arrival, “at once consulted a physician, who put her on a regular system of baths, diet, etc., suited to her case.” The cure of her chorea “was due to a proper use of the waters and baths, as all medicines had failed to benefit previous to this: what little medicine she had taken only aided in the cure.”<sup>47</sup> As was generally the case at earlier hydropathic institutions, cures at the springs were often attributed to specific rituals composed of bathing and drinking as opposed to any sort of chemical concoction, though the authority of the medical practitioner to dictate what was a proper treatment plan was still maintained in some cases.

If this authority was granted at times, its nature was not an oppressive one, and patients at the springs enjoyed an active role in the healing process. In an estimation of expenses in one guidebook, prices are given without the inclusion of advice from a

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<sup>47</sup> Johnston, *The Eureka Springs of Arkansas* (1885), 43.

physician for those “who have been for a long time afflicted with a chronic complaint... [and] do not need medicines or physician’s advice.”<sup>48</sup> Using the waters was completely permissible without the guidance of someone with specialized training, a major departure from hydropathic practice. Indeed, far more important than a doctor’s guidance in the realization of a cure, if we are to take the relative balance of content in promotional material as a gauge, was the development of a dialogue amongst fellow invalids.

A decided emphasis was placed on the community one became a part of as a health-seeker at the springs by both publicists and visitors. One guidebook advertises the “Invalid’s Association,” established to organize regular meetings of the town’s current convalescents for the purpose of providing them a forum for sharing information about the best places to stay and springs to visit. It likewise encourages each to “relate the history of his or her case from its incipency to their arrival at Eureka Springs, and also the effect of the water upon them.”<sup>49</sup> It appears that these meetings were well-attended; the *St. Louis Globe-Democrat* reports “hundreds” present at a gathering of invalids in the spring of 1881.<sup>50</sup>

The sick frequently shared their experience of illness outside of formal settings as well. An “eyewitness” to daily life in Eureka Springs in its early years states that,

[Y]ou speak to everybody you meet, whether you know them or not, and are sure of a courteous, cordial return. The preliminary steps at meeting are questions as to whence you came, when you arrived, how long you will stay, your malady and your name.<sup>51</sup>

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<sup>48</sup> Cutter, *Cutter’s Guide*, 34.

<sup>49</sup> Ibid., 33.

<sup>50</sup> “Multiple News Items.” *St. Louis Globe-Democrat* (St. Louis, Missouri), March 4, 1881.

<sup>51</sup> Pinkley-Call, *Stair-Step-Town*, 18.

Health-seekers thus received encouragement and had a desire to share their struggles with disease not only with their doctors at the springs (if they so chose) but also their fellow sufferers, the result being a sense of empowerment in taking an active role in the discourse surrounding their experience by identifying, finding meaning in, resolving, and publicizing their illnesses. Their discursive contributions to the medical meanings constructed around the springs were disseminated through conversations with other invalids, friends, and family, through written correspondences, and through their more active contributions to and circulation of marketing materials. And while mainstream medicine maintained a presence, its role in medicalizing Eureka Springs remained auxiliary.

### **Investment and the Urban Invalid**

The town was initially boosted primarily through newspaper articles which often contained these vernacular additions to the narrative of the springs' therapeutic value, but financial troubles following the initial influx of settlers necessitated a more robust marketing strategy. Eureka Springs's monetary situation was complicated for several reasons, the first of which is a common problem for tourist towns. The resident, tax-paying citizens of the town were a relatively small percentage of the individuals making use of city resources at any given time. As town historians June Westphal and Catharine Osterhage have put it, "the City government faced a paradoxical situation; that of having to provide the necessary facilities for a city of many thousands with an income from taxing only about one-third of the citizenry."<sup>52</sup>

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<sup>52</sup> Westphal and Osterhage, *A Fame Not Easily Forgotten*, 47.



Additionally, land claim issues complicated the town's plight. Unbeknownst to those who constructed their homes and businesses on plots within the townsite, several men from Missouri had, upon hearing about the surge of growth, filed claims to the land under the Homestead Act in 1879. A mining company followed suit in 1880, bringing the grand total of claims on some lots to three separate parties. The conflict dragged on until 1885 when a compromise was finally reached after extensive (and expensive) legal squabbling, but the intermittent period was especially financially difficult for the fledgling city.<sup>53</sup>

These problems combined with a general need for investment to build basic infrastructure led to the founding of the Eureka Springs Improvement Company, comprised of a group of investors primarily from New York, St. Louis, and Little Rock, and headed by northern Civil War veteran General Powell Clayton. These men brought with them money and influence, which they used to back much-needed improvements and also to advertise more aggressively and methodically. A railroad sponsored by the Company was constructed between Seligman and Eureka Springs between 1881 and 1883 at "an enormous expense," finally, in the eyes of many, establishing the town's "permenency [sic]... as a fixed fact."<sup>54</sup> The effects were felt immediately; Missourians, always Eureka Springs's most wealthy devotees, now had easy access, and freight trains

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<sup>53</sup> The issues were settled after several court cases, costing a significant amount of money and hindering some construction projects. For more detailed information, see Kalklosch, *The Healing Fountain*, 36-37; Westphal and Osterhage, "A Firm Abiding Place," in *A Fame Not Easily Forgotten*. On its resolution, see "A Big Contest Settled." *St. Louis Globe-Democrat* (St. Louis, Missouri), March 13, 1885.

<sup>54</sup> "To Eureka Springs. A Locality of Miracles Reached by Railroad. Prominent Personages Attend the Opening of the Eureka Springs Railway." *Daily Arkansas Gazette* (Little Rock, Arkansas), February 3, 1883. Much dynamite had to be used to blow through the mountainous terrain. Nellie Mills gives a firsthand account of the process in her memoir, *Early Days at Eureka Springs*, 21-23.

brought in amenities previously inaccessible to the town's residents and visitors. The company also built the city's first high-end hotel and spa, which still serves as one of its major draws. The capitalists who invested over \$200,000 to finance The Crescent's construction believed it would "secure abundant patronage," and to that end it was "furnished in the most substantial and elegant manner."<sup>55</sup>

In order to ensure that these significant investments would yield, the Improvement Company began to devote more time, energy, and money to boosting. The fruit of their labors was multifaceted, but most of the material I have been able to locate and directly link to them comes in the form of pamphlets. The first was published in 1886 in Buffalo, New York by the Matthews & Northruff Co., engravers and printers that were popular enough to have produced promotional material for vacation spots as far away as Florida and as well-known as Keuka Lake.<sup>56</sup> These publications were of a higher quality and targeted at a slightly wealthier and more urban audience. Now that Eureka was connected via railway to St. Louis and could offer if not deluxe, at least superior accommodations and amenities, the base of potential clientele grew and changed. Many of the same healthcare issues plagued the richer health-seeker, to be sure. Slightly later promotional material still emphasizes the ability of the springs to do what most doctors could not. But continuity was accompanied by change, and the potential consumer's attention was diverted as well to an exciting, mysterious origin

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<sup>55</sup> *The Eureka Springs of Arkansas and its New Hotel the Crescent* (Buffalo: Matthews & Northruff, Art Printing Works, 1886), 9. Special Collections, University of Arkansas Libraries, Fayetteville.

<sup>56</sup> Jacksonville, St. Augustine, and Indian River Railway Company, Florida, *Beauties of the East Coast* (Buffalo: Matthews & Northruff, Art Printing Works, 1893); *Lake Keuka* (Buffalo: Matthews & Northruff, Art Printing Works, 1891).

story for the springs and a romantic enumeration of the city's natural, life-giving location—the perfect escape for the nervously exhausted urbanite.

*Origin Stories and the Noble Savage*

Promotional material produced by the Improvement Company included a new origin story for the town, one evoking the trope of the Noble Savage. Though some of the earliest booklets produced pre-Improvement Company included a brief history of the town, the origin story was probably more or less factual (and has been detailed at the beginning of this chapter). One of the first pamphlets I have been able to locate that was probably sponsored by the Company was published in 1887 in St. Louis. A detailed rendition of The Crescent Hotel adorns the front cover, and the title page features its distinctive fireplace, located in the lobby.<sup>57</sup> The first double-page spread with text includes one of the most vivid, detailed illustrations contained in the entire pamphlet. It depicts five Native Americans, two of whom are drawing water from a spring flowing from the side of a rock formation.

The image is intended to illustrate the story related beneath it. The history of the town, the author begins, “is tinged with romance and tradition running back to the time when Arkansas was a part of the dominions of the King of Spain.” Quickly skipping over the springs’ life under the Spaniards, the story picks up in 1847, when a certain J. M. Richardson of Carthage, Missouri, tells of his experience meeting “‘White Hair,’

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<sup>57</sup> It is recognizable by the poem inscribed above the mantel, which reads: “Although upon a summers day/ You’ll lightly turn from me away./ When autumn leaves are scattered wide/ You’ll often linger by my side./ But when the snow the earth doth cover,/ Then you will be my ardent lover.”

chief of the Osages,” and their discussion of “a wonderful ‘Medicine’ Spring.”<sup>58</sup> The story continues on the next page, although in the form of a letter to Powell Clayton (a sure sign of the Improvement Company’s participation in the development of the

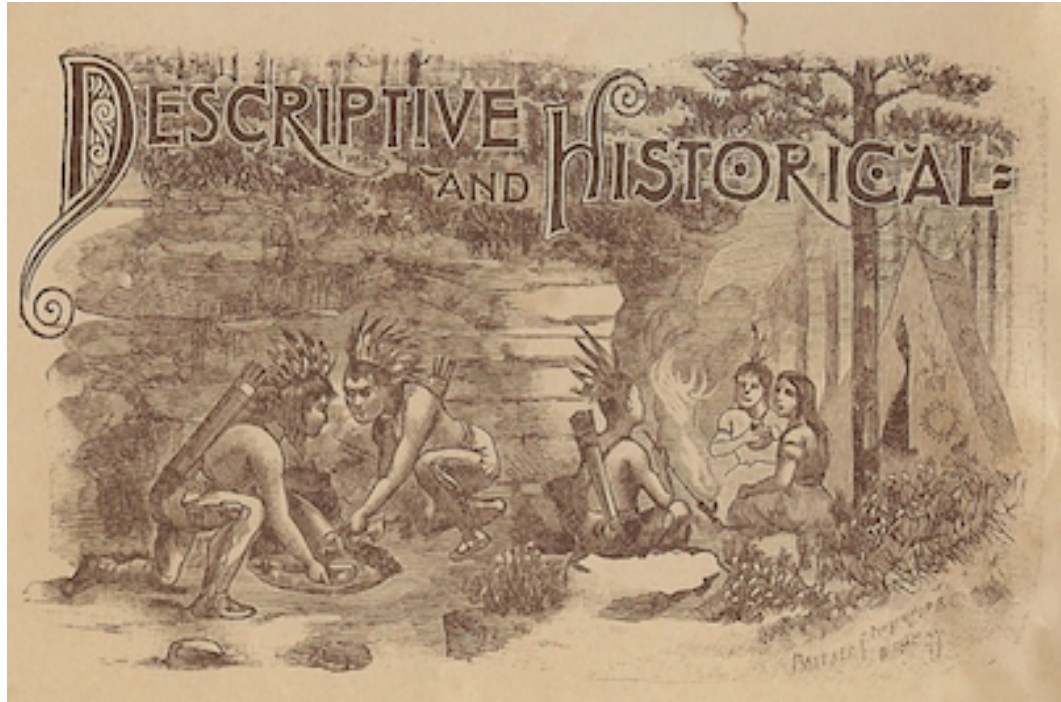


Figure 1. *Descriptive and Historical*. 1887, Print. In *Eureka Springs, Arkansas*. St. Louis: Woodward & Tiernan Printing Co., 1887.

booklet) from Richardson. The Great and Little Osages believed, Richardson claimed, that “the spirit of the great Medicine Man hovered round the spring,” and they would never camp or fight near it.<sup>59</sup> They held it sacred and ascribed to it supernatural powers, according to the author of the booklet.

It is possible that at least the Osages, whose pre-colonial territory included northwest Arkansas, interacted and made meanings around the springs. It is almost certain, however, that this particular interpretation of that history serves purposes beyond an acknowledgement of Native American beliefs and practices before their

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<sup>58</sup> *Eureka Springs of Arkansas* (St. Louis: Woodward & Tiernan Printing Co., 1887), 1-2. Special Collections, University of Arkansas Libraries, Fayetteville.

<sup>59</sup> Johnston, *The Eureka Springs of Arkansas*, 8.

disruption by American colonizers. The artist's choice of clothing is telling; it seems to conform to Stephanie Molholt's concept of the "Plains Indian Motif." Illustrations that fall into this category depict headdresses, buckskin clothing, tipis, bows and arrows, and tomahawks, all of which are characteristic of Indigenous tribes who lived in what is known as the Great Plains region of the United States.<sup>60</sup> It is probably more coincidental than a sign of cultural sensitivity that the two tribes mentioned in the booklet containing the image are, in fact, categorized as Plains Indians, rendering the depiction at least somewhat historically accurate in regards to the attire and surroundings. Molholt argues that a vast majority of advertisements that portray Indigenous peoples, however, dress and situate them in the interest of facilitating easy associations with preconceived ideas about how Native Americans look and behave rather than for historical accuracy. Travelling Wild West Shows like that of "Buffalo Bill" Cody, which became quite popular around Eureka Springs's founding and featured Indigenous actors dressed similarly, would have made the attire of Plains Indians especially familiar to potential clientele.<sup>61</sup>

That the people depicted in the illustration are camped out in front of a spring, the two most authoritative figures—men with longer hair and elaborate headdresses—drawing water from its source, suggests to the consumer that this was held to be an honored ritual by the Native Americans. All participants in the ceremony are grim-faced and attentive except for a man with his back turned smoking an elongated pipe (another trope Molholt sees frequently). Though Molholt argues that depictions of Indigenous

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<sup>60</sup> Stephanie Molholt, "A Buck Well Spent: Representations of American Indians in Print Advertising Since 1890," PhD diss., (Arizona State University, 2008), 68-69.

<sup>61</sup> Molholt, "A Buck Well Spent," 74.

peoples, especially ones that contain other elements of the Plains Indian Motif, are often portrayed behaving wildly or committing acts of violence, the scene in the booklet is distinctly peaceful.<sup>62</sup> Perhaps this behavior from Native Americans would have been seen as striking to white, middle class Americans, a further indication that the powers of the waters were sacred and profound. Even, as nineteenth-century white health-seekers would have understood it, unruly and warmongering tribes respected the springs' healing powers enough to alter their conduct in reverence.

In a different booklet is the tale of “Mor-i-na-ki, or the beautiful flower... daughter of one of the greatest Sioux chiefs.” Supposedly coming from the mouth of “a French half-breed” called Jean Baptiste, son of Mor-i-na-ki and a French fur trader, the narrative mirrors that of many testimonials; some members of a Sioux tribe, after a particularly rough winter, migrated south in search of food. When the daughter of the chief fell ill and the “medicine-men” could not help her, a local tribe directed the Sioux to “a spring of water flowing from the side of a mountain... whose water being drank would remove the sickness and restore sight to the blind.” It worked, and the “tradition of the south-land spring was carefully preserved in the tribe.”<sup>63</sup> Cherokees were also mentioned as having a tradition in another pamphlet, both before and after their forced removal to Indian Territory, of coming to the springs on an annual basis.<sup>64</sup> Playing into the discourse of regular medicine's ineffectuality, these constructed narratives further solidified the waters' healing powers. No medicine—even that of Indigenous cultures—

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<sup>62</sup> Molholt, “A Buck Well Spent,” 68.

<sup>63</sup> Johnston, *The Eureka Springs of Arkansas*, 6-8.

<sup>64</sup> *Ibid.*, 5-6.

had answers to some illnesses, but Native Americans had found, used, and cherished an alternative solution long ago in the springs.

The idea that Native Americans might be worthy of imitation in this regard played into the widespread trope of the “Noble Savage,” a primitive form of humanity often embodied by the Indigenous man or woman. “Uncivilized” and thus closer to nature, the Noble Savage was more in tune with his environment than the white man and as such was privy to the secrets of its wholesome healthfulness. Philosopher Michael Green has argued that the image of the Noble Savage is an idealized one, “reflect[ing] more the yearnings and dissatisfactions of those who created...[it] than the real life situation of the individuals upon whom the image is projected.”<sup>65</sup> The increasingly urban audience at which publicists were directing their narratives of health would have found this appeal particularly palatable in the midst of a period consumed by anxieties centered on industrialization and urbanization.

Three separate Native American nations were thus woven into the mythological construction of the springs’ origins. The waters’ healing powers were given a history and depth rooted in the inexplicable healing powers of nature and a mysterious and over-arching legitimacy that transcended the problems of medicine—western or otherwise. Janet Mace Valenza has discussed such myth construction in her work on natural springs and resort towns in Texas, asserting that they often proved very important in the development of explanations and expectations about natural waters’ healing abilities. In an almost direct juxtaposition to the solid, concrete, and logical appeal that science would provide in later years, these myths functioned in Eureka, as

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<sup>65</sup> Michael Green, “Images of Native Americans in Advertising: Some Moral Issues,” *Journal of Business Ethics* 12, no. 4 (1993), 328.

they did in Texas, “as a psychological tool, with intuitive and spiritual dimensions,” creating and enhancing therapeutic expectations about the springwater and its surroundings that had no basis in contemporary medicine or science but spoke in extremely compelling terms to their intended audience.<sup>66</sup>

### *Urban Pathologies and Neurasthenic Discourse*

Not all aspects of early discourse surrounding the springs were completely at odds with that of regular medicine, however, particularly as the town’s targeted client base became more urban. As hinted at above, the development of and expanding access to technologies that increased the speed at which people travelled and communicated engendered much anxiety in the late nineteenth century, a phenomenon historians of psychology and mental illness have recognized as underlying the popularity of a uniquely American kind of nervous illness called “neurasthenia.” Etiologically enumerated initially by New York neurologist George M. Beard and his colleagues, all members of the American Neurological Association, a professional association dominated by elite east coast physicians, it was prevalent in both medical and lay discourse between about 1880 and 1910.<sup>67</sup> Its symptomatology was broad but included fatigue, depression, headaches, digestive troubles, and paralysis, all of which were understood to be rooted in a depletion of nervous energy. Many of the disease’s symptoms had been listed as curable by a visit to the springs from its earliest promotional literature in 1879; indeed, it is perhaps in part because they were so

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<sup>66</sup> Janet Mace Valenza, *Taking the Waters in Texas: Springs, Spas, and Fountains of Youth* (Austin: University of Texas Press, 2000), 45-48.

<sup>67</sup> F. G. Gosling, “The Price of Progress,” 9-29 in *Before Freud: Neurasthenia and the American Medical Community, 1870-1910* (Urbana: University of Illinois Press, 1987), 13.



ambiguous and malleable that the town's discursive contributors adopted neurasthenic discourse in the creation of their understandings of the springs' healthfulness. If the location and its waters could be said to restore nervous energy to the masses, its therapeutic power would approach that of a panacea.

This combined with its designation as an urban and sophisticated illness rendered neurasthenia an especially fertile ground for discursive transfer between mainstream medicine and Eureka Springs. As Anna Katharina Schaffner has most recently argued, neurasthenia was primarily understood as a disease brought on by the toll modern life took on the bodies of its most culturally evolved participants. "The modern environment," she writes, "particularly the urban environment, was thought to generate too many stimuli such that the senses were incessantly assaulted by noise, sights, speed and information."<sup>68</sup> Facing an onslaught of overstimulating modernity every time they walked out their front doors (and sometimes even inside their homes), neurasthenics' nervous energy was quickly used up during daily activities, to the detriment of their mental and physical well-being. Their suffering, however, was a necessary result of their extreme civilization and was even somewhat fashionable. To have neurasthenia was generally (though certainly not always) to be of the class of citizen whose occupational roles involved "brain-work" rather than manual labor.

F. G. Gosling has contended that the discourse surrounding neurasthenia was developed by and integral to the practice of physicians both rural and urban, eastern and western. His survey of journal literature, however, shows no indication that this was

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<sup>68</sup> Anna Katharina Schaffner, "Exhaustion and the Pathologization of Modernity," *Journal of Medical Humanities* 37, no 3 (2016), 331.

true in Arkansas, though he does cite case studies from Kansas and Nebraska.<sup>69</sup> A look through the various publications of the Arkansas Medical Society reveals that the state may serve as an interesting counterpoint to Gosling's generalization about the ubiquity of interest in neurasthenia. Though contributors to the journals and transactions of Arkansas doctors sometimes employ terminology similar to those of Gosling's actors in describing relationships between physical complaints and their potential psychological causes, the medical men of Arkansas by and large seem to have been willfully uninvolved in neurasthenic discourse. Indeed, when they write on neurology or psychology at all, physicians practicing in Arkansas understandably tend to focus on the nervous system's role in ailments, a good example of which is malaria, that are more prevalent amongst rural populations in places with low altitudes and warm climates.<sup>70</sup> With few metropolitan spaces, none of which were as populous as the cities in which a majority of the work on neurasthenia was being produced, Arkansas provided little incentive for interest in a disease of urbanization.

If the conceptual and linguistic markers of neurasthenia are only lightly visible in the work of Arkansas's physicians, their presence is unmistakable in the discourse of Eureka Springs's salubrity. Publicists often seem to have had to look outside the state to find physicians willing to contribute to the creation of the springs' healthfulness, and

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<sup>69</sup> Gosling, "Appendix A: Sources and Methods" 177-183 in *Before Freud*.

<sup>70</sup> For example, W. P. Hart of Washington County (just south of Eureka Springs's Carroll County) explores the possibility of a psychological explanation for the variation in manifestations of malaria. Recounting an experiment conducted by a colleague in New York and a case study of another in Pennsylvania, he convincingly if incorrectly argues that malaria is the result of a "disturbance of the central nervous system" brought on by environmental factors rather than an invasive microorganism. "The Etiology of Malarial Haematuria," 36-45 in *Transactions of the State Medical Society of Arkansas at its Twelfth Annual Session* (Little Rock: Press Printing Company, 1887).

early marketing material includes statements from doctors from various locations in the midwest. These remote participants, if they offer any sort of theoretical hypothesis for the waters' effects, frequently do so in terms of nerves and exhaustion. Take the endorsement of Memphis physician William Hewitt, which begins with a list of diseases he believes the waters benefit. Notably, it includes many digestive complaints including nervous dyspepsia and diarrhea. He then outlines the reason behind the springs' potency; Eureka's water is therapeutically active because it alleviates "deranged nervous action," the cause, he asserts, of many of the ailments he listed.<sup>71</sup> While unsophisticated, his explanation is somewhat commensurable with that of his neurologist contemporaries and may have been simplified with a lay audience in mind. In any case, it certainly displays an understanding of the springs' powers couched in a neurasthenic framework.

Health-seekers putting words to their experiences at the springs, too, often made use of a schema much like that of doctors engaged in the study of neurasthenia for understanding the waters' healing properties, defining their complaints using medical vocabulary and understanding their cures in the context of an economy of nervous energy. Poindexter Dunn, whose testimony was used above as evidence to support a lack of faith in regular physicians' healing ability nonetheless believed he was suffering

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<sup>71</sup> Dr. Hewitt's endorsement is printed in two booklets; Johnston, *The Eureka Springs of Arkansas* (1885), 31 and *The Eureka Springs of Arkansas and its New Hotel the Crescent*, 19. While I could not find proof that Hewitt wrote the copy, I did find evidence that he was a practising doctor in Memphis. See "Memphis' Sanitation." *Daily Arkansas Gazette* (Little Rock, Arkansas) November 16, 1879, and that he authored other promotional material for Eureka. See Hewitt, "Eureka Springs: The New Bethesda at Arkansas - How to Get There and the Benefits to be Derived." *Daily Arkansas Gazette* (Little Rock, AR), July 6, 1880.

from dyspepsia and nervous depression.<sup>72</sup> Even if his doctor could not heal him, Dunn still accepted established medicine's diagnostic authority and integrated parts of its discourse into his personal pathology.

Indeed, it would appear that while doctors had lost therapeutic jurisdiction in regards to many diseases, discourses being developed by physicians interested in the nervous dimension of disease were exercising considerable influence over vernacular audiences in both diagnostics and therapeutics at the springs. Treatment for neurasthenic patients was a topic of much debate in the medical world but generally included a combination of different approaches which could include rest, diet regulation, active or passive exercise, drugs, and travel.<sup>73</sup> As the discourse around nervous disease developed, "mental therapies" that encouraged a change in habit and thought pattern became more popular. Therapeutic travel was one option. It was believed that the change in scenery provided a "healthful diversion," lifting the sick out of the rut of routine sights, activities, and thought patterns. Charles Mills, a Philadelphia neurologist, recommended that nervous individuals take two vacations a year to avoid exhaustion.<sup>74</sup>

The testimonial of Edward A. Louis is a representative example of the way that the discourse of neurasthenia wove its way into that of the springs in visitors' narratives. According to his account, the judge arrived in Eureka in September of 1881 suffering from a host of physical complaints but was most concerned about being "weak and languid, helpless and incapacitated for labor, physical or mental, especially the

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<sup>72</sup> Johnston, *The Eureka Springs of Arkansas*, 44.

<sup>73</sup> Gosling, *Before Freud*, 108-109.

<sup>74</sup> *Ibid.*, 134.

latter.” Four weeks later, he hardly knew himself. He could walk several miles and felt “a healthy vigor” that he had not enjoyed in twenty years. When he returned to his life in St. Louis, however, his health again declined; he was forced to come back to Eureka, where he stayed until he had established “new habits of healthy action.” He emphasizes at the end of his account that his healing occurred “without the aid of any medical attendance, prescriptions or advice whatever.”<sup>75</sup> A cornucopia of vague physical complaints understood under the umbrella of weakness and mental exhaustion brought Louis to the springs, and after he had stayed long enough to see them diminish and his youth and strength rebound, he went back to his life in the city. He identifies his hurried return as the culprit behind his relapse, recognizing the need to use his escape from urbanity as a means of establishing healthier modes of living and thinking. Though he claims to take no advice from a doctor, the actions he took, if his testimony can be believed, were very much in line with what one would have recommended. Louis thus understood both his medical issue and its solution within the discursive boundaries of mainstream medicine, if not quite within the jurisdiction of its authorities.

### **Anti-Science Sentiment at the Springs**

Though the discourses of sectarian and regular medicine found some welcome in the narratives of health being built around Eureka Springs in its early years, the position of science was quite different. Noticeably lacking from most promotional material before 1890 is any sustained attempt at bolstering scientific arguments in favor of the springs’ efficacy. In fact, more often than not, publicists, patrons, and physicians

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<sup>75</sup> Johnston, *The Eureka Springs of Arkansas* (1884), 41-42.

alike describe the mechanisms of the waters' healing powers in terms of their incomprehensibility, employing terms like "miraculous," "marvelous," and "magical."

Early newspaper stories about the springs consistently referred to the action of the water as supernatural and mysterious and felt comfortable pointing toward the magnitude of its devotees as proof that, comprehensible or not, it held great therapeutic value. In April of 1881, a reporter in Eureka Springs sent a dispatch the *Daily Arkansas Gazette* discussing the "wonderful something in the waters" that was healing hordes of invalids there.<sup>76</sup> An 1883 headline in the same newspaper draws attention by calling Eureka Springs "a locality of miracles."<sup>77</sup> These tales traveled further than Arkansas, appearing most frequently in the *St. Louis Globe-Democrat* but reaching readerships as far away as those of New York's *Daily Graphic*.

A lengthy, illustrated article printed in May of 1882 admits that "the facts [concerning the cures] are hard to ascertain," especially because "[w]here the power is that lurks in these waters has eluded the chemist." What is certain, however, is that the springs exhibit a "miraculous" ability to heal, a claim that can only be doubted if the reader is willing to disregard "the testimony of hundreds."<sup>78</sup> Painting the chemist's findings, which showed few minerals in the waters, as inconclusive rather than negative, the article's author asks his audience to instead look to the empirical evidence found in the sheer number of testimonials to substantiate the claim of the "miraculous" healings. This argument was used by most attempting to explain the water's salubrity in

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<sup>76</sup> "Over the State. Items of News Gleaned from the Gazette's Exchanges. Eureka Springs Dispatch 22." *Daily Arkansas Gazette* (Little Rock, Arkansas), April 28, 1881.

<sup>77</sup> "To Eureka Springs, A Locality of Miracles Reached by Railroad," *Daily Arkansas Gazette* (Little Rock, Arkansas), February 3, 1883.

<sup>78</sup> "Eureka Springs, Ark.—A City Built in Less Than Three Years—Its Wonderful Waters," *Daily Graphic* (New York, New York), May 9, 1882.

spite of the data provided by chemists, finding its way into the discursive contributions of doctors and laypeople alike.

Indeed, copy within booklets and pamphlets runs similarly, directing the potential customer's eyes toward the testimonials rather than the chemical analyses. Even the testimonial sections devoted to physicians' endorsements are filled with the same sort of evidentiary presentation and weighting, indicating a discursive conflict between medicine and chemistry. Dr. Hewitt from Memphis, who we saw earlier using the language of neurasthenia, begins his endorsement by commenting on the insufficiency of the chemical analysis in explaining the "wonderful curative powers" exerted by the waters. Though he does end up producing a somewhat theoretical explanation, he necessitates it by citing the numerous confirmed cures the springs have wrought.<sup>79</sup> Hewitt's approach is above all an empirical one, and he encourages audiences to value it over the inductive one of the chemist.

While Hewitt sees the benefit in attempting a theoretical explanation, some contributing to the springs' discourse of health were convinced the exercise was superfluous. Dr. W. W. Johnston, whose opinion on the matter is printed in both booklets he produced in 1884 and 1885, is one example. After the analyses of the springs are presented, the author, much like those above, claims that the work of the chemists is useless in the case of Eureka Springs's water. Johnston argues that "chemistry can tell us nothing of the action of belladonna, strychnia and many other drugs, but from observing their effects when exhibited, we learn that belladonna will dilate the pupil... and strychnia will produce convulsions." The *medical* value of

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<sup>79</sup> *The Eureka Springs of Arkansas and its New Hotel the Crescent*, 19.

substances, he contends, are invisible to the chemist. Their realm of knowledge-producing authority ends with a detailed description of a material's constitution; "Chemistry can isolate each constituent and name it, but when used either singly or in combination, chemistry can give no light as to their action." He instructs health-seekers to consider the testimonials, the only real way of proving therapeutic efficacy, which are of more importance than "all the theories that can be adduced."<sup>80</sup>

Hewitt, Johnston, and the unnamed authors of the Little Rock and New York newspaper articles were all in favor of a distinctly empirical approach to understanding the healing properties of the springwater. In contending with scientific data that did not provide a mineral source with which to inculcate therapeutic meaning, they wrote chemical discourse out of that of the springs almost entirely. They relied instead on empirical evidence, which is more understandable in light of the focus early vernacular discourse maintained on the importance of lay community in healing during a troubling era for medicine. Skeptical of doctors and scientists alike, the main discursive contributors to Eureka Springs's healthfulness in the first few years of its existence were cured invalids turned publicists. It is telling, however, that their apprehension did not render their discursive endeavors completely isolationist. Chemical analyses were present if dismissed, and doctors' language and opinions were sometimes sought out and utilized. These were the initial signs of an interchange that, as the town approached the 1890s, would prove increasingly active.

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<sup>80</sup> Johnston, *The Eureka Springs of Arkansas*, 15-16.



## Chapter Two: “Pure air blows and pure water flows.”<sup>81</sup>

A guidebook sponsored by the Frisco Railway System and published in 1903 advertises a therapeutic retreat. It describes a scenic “health and pleasure resort for people from all parts of the United States,” made distinctive by “a majestic and imposing hotel of stone” situated on the highest peak of the surrounding Ozark Mountains. This high altitude location, combined with the healing properties of the springs that provided the impetus for the settlement of what would otherwise have been “a most unnatural site for a town,” make it the ideal location for a health resort of national repute. The town’s salubrity is substantiated not only by several testimonials from past patrons but by the data numerous scientists have provided from their studies of the area. The author of the book asserts that the springwater’s healthfulness can be corroborated by “the best chemists in the country” who have analyzed the water’s contents, rendering them visible and understandable for the discriminating health-seeker. What is more, the springs are supplemented by a climate and elevation particularly suited for restoring health and vitality to the unwell; a presentation of average temperatures and rainfalls provides quantitative evidence. “Where is there another health resort which has so much to offer the invalid as Eureka Springs? Besides its curative and palatable waters, it gives him altitude and pure, dry, mountain, pine-laden air, clear, bright weather, a delightful temperature and most charming and enjoyable scenery.”<sup>82</sup>

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<sup>81</sup> *Eureka Springs: Drink from the Fountain of Youth, Nature’s Laboratory* (Eureka Springs: Commercial Club, 1919), 2. In *The Springs of Eureka Springs: historic archive*. Special Collections, University of Arkansas Libraries, Fayetteville.

<sup>82</sup> John W. Kearney, *The Summit of the Ozarks* (Buffalo: Matthews-Northrup Works, 1903), 35.

This promotional booklet stands in stark contrast to the one that initiated the previous chapter, indicating that the springs' publicists were changing their strategies by the turn of the century. Rather than glorifying the inability of scientists and doctors to explain the salubrity of the waters and climate from which patrons of Eureka Springs benefited, marketing narratives began to integrate scientific and medical discourse. The distance between mainstream therapeutics that had provided the resort with disillusioned clientele in its early years grew progressively less tenable as the therapeutic nihilism that characterized early- to mid-century medicine gave way to revitalized faith in science as a way to develop new remedial strategies.

The years between 1885 and 1900 saw Eureka Springs at its peak as a health tourist attraction. By 1890, the town had a railroad, paved, gaslit streets, several upper class hotels, a well-run police force and board of health, a sewage disposal system, and the locally sourced stone retaining walls that continue in the twenty-first century to add to its unique feel. Telephone lines were installed in 1895, and a municipal water supply system, serving the entire town, was worked out and constructed around that time as well.<sup>83</sup> Most of this was done under the direction of the Board of Public Affairs, which was, for all intents and purposes, the new, civically sponsored rather than privately run Improvement Company. General Powell Clayton was predictably the chair of this organization as well.<sup>84</sup> Eureka was thus firmly established and thriving after its initial struggle, or so it seemed.

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<sup>83</sup> Westphal and Osterhage, "The Years of Grandeur: 1885-1900," *A Fame Not Easily Forgotten*.

<sup>84</sup> *Ibid.*, 55-56.

The rapidly executed improvements combined with the financial repercussions of the lengthy land claim issues meant that Eureka remained deeply in debt through the 1890s. The boosters' investments could only fund so much civic development. Town historians Westphal and Osterhage describe how the city government began issuing "scrips," similar to bonds, to cover costs, relying on citizens to cash them in at a later date when the funds would presumably be present. While a workable short-term fix, the debt accumulated at a hopeless pace.<sup>85</sup> To make matters worse, a series of fires in the late 1880s and early 1890s plagued the town, annihilating several major hotels including the Perry House (which contained sixty rooms), the Western, and the Grand Central.<sup>86</sup> Marketing, then, was still of the utmost importance; the survival of the financially insolvent tourist town depended upon it, and the wealthier the patrons, the better. Wealth tends to correlate positively with education, and the publicists were aware that a more sophisticated clientele would require more sophisticated marketing techniques. It would no longer be enough to write off the health benefits to be enjoyed at the resort as "magical" or "marvelous" if the town hoped to expand its reputation beyond Missouri and Arkansas. It needed a presence in developing medico-scientific discourses in order to tap into more urban markets, and trends in environmental medicine—including mineral water chemistry and climatology—would provide its inroad.

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<sup>85</sup> Westphal and Osterhage, *A Fame Not Easily Forgotten*, 46.

<sup>86</sup> "Big Fire at Eureka Springs, Ark.," *The Milwaukee Sentinel* (Milwaukee, Wisconsin), November 24, 1888; "Heavy Loss at Eureka," *Galveston Daily News* (Houston, Texas), October 29, 1890. Estimated loss of \$400,000 in all over the four years between 1888 and 1892, with "very little insurance."

### Physicians and the *Eureka Springs Medical Journal*

Important intermediaries in this transition were the physicians practicing in Eureka Springs. Their livelihoods depended upon a steady flow of health tourists; as recognized cultural and intellectual authorities on health and disease in Arkansas and Eureka in particular, medical practitioners in the town had contributed discursively to the construction of the healthfulness of the springs from the beginning. As discussed in the previous chapter, they often provided testimonials to be printed in promotional material, corroborating invalids' testimonies with empirical assurances. As medical and scientific discourse drew closer to one another in the second half of the nineteenth century, however, the nature of their involvement changed. They began to do their part by attracting clientele interprofessionally, appealing to science and the wider medical profession through the use of chemical and climatological language.

In February of 1893, the first issue of the *Eureka Springs Medical Journal* was printed and distributed. As the "official organ of the Eureka Springs, Carroll County, and Tri-County medical societies," it was "devoted to medicine, surgery, and to Eureka Springs as a Health Resort."<sup>87</sup> Most issues contain articles pulled from other, more widely circulated publications, papers read at society meetings, and news of and advertisements for patent medicines, railway lines, individual practitioners, and health resorts—especially Eureka Springs. A majority of the appropriated work consists of studies and commentary on the effects of weather, climate, water, and exercise on human health, topics which would have been inviting and valuable for practitioners operating out of a health resort. These articles indicate not only that the medical elite at

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<sup>87</sup> *Eureka Springs Medical Journal* 1, no. 1 (1893), 1.

the springs read widely, keeping informed of other scientists' and practitioners' work on environmental health and hydrotherapy; they show that Eureka's physicians were integrating these conclusions—and the language used to describe them—into an increasingly scientific narrative of health.

The advertisements, however, are telling as well, as they further elucidate the motivations of the editors. While advertisements for patent medicines, practitioners, other health resorts, etc., are boxed off and confined to the right side of each page, promotional material for Eureka Springs is sprinkled throughout the text among case studies and medical papers. One, after verbosely describing the Crescent Hotel, reads,

When you have patients who want rest, with all the advantages of climate, water, and scenery, you cannot do as well anywhere else as here for them. Only the facts need be known, and we challenge investigation as to our advantages as compared with any other place.<sup>88</sup>

The rhetorical plea for further study encourages the doctor, a potential source of referrals, that doing so would merely prove the superiority of Eureka Springs. Couched amongst original research, theorizing, and medical histories, the publicity is camouflaged as purely medical and scientific discourse.

### **Chemistry**

Science's entry into marketers', and thus physicians' and laypeople's, narratives, however, requires a bit more elucidation. Chemistry was the first science to have an appreciable presence in advertisements for the springs. As early as 1882, the *Daily Arkansas Gazette*, based in Little Rock, reported on a chemist from St. Louis visiting Eureka Springs for the purpose of analyzing its waters. Dr. Juan H. Wright, an "expert analytical chemist," had come to examine Eureka's "hygiene, location, scenery, and

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<sup>88</sup> "The Crescent Hotel," *Eureka Springs Medical Journal* 2, no. 1 (1894), 3.

geology.”<sup>89</sup> Wright’s work—a breakdown of the gaseous components of the waters—is found in almost all subsequent promotional publications, along with a table containing an itemized list of solid mineral content put together by Professors Potter and Riggs of St. Louis University. In earlier advertisements, the analyses were skipped over and even downplayed; in material produced after 1890, however, there was often an explanation of the charts’ contents.

The use of chemical analyses in the mineral water industry was far from a novel practice when publicists in Arkansas began to employ it. Early modern historians of chemistry, most notably Noel G. Coley, have discussed earlier manifestations of the method in detail, noting its prevalence in seventeenth century Europe. As far back as the 1630s, men like Edward Jorden, a “chymical physician” in Bath, England, were using Paracelsian and Helmontian iatrochemical methods to assess water content and correlating their findings with medicinal effects in the body. Jorden advocated chemically induced crystallization and precipitation as techniques for extracting and identifying the metals and other minerals that made waters distinct, and he categorized each substance as “penetrating, astringent, opening, resolving, attracting, mollifying... and/or cleansing,” based on its elemental composition. From there, he recommended different waters for different ailments.<sup>90</sup> Coley gives several other examples of this kind of work being done.<sup>91</sup> Though many of these physician-scientists’ methods differed to some extent, they believed that mineral waters harbored some of nature’s most potent

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<sup>89</sup> “Arkansas Resorts. A St. Louis Chemist in the City Yesterday - Object of His Visit.” *Daily Arkansas Gazette* (Little Rock, Arkansas), October 27, 1882.

<sup>90</sup> Noel G. Coley, “‘Cures without Care’: ‘Chymical Physicians’ and Mineral Waters in Seventeenth-Century English Medicine,” *Medical History* 23 (1979), 198-199.

<sup>91</sup> See Coley, “Physicians, Chemists and the Analysis of Mineral Waters: ‘The Most Difficult Part of Chemistry,’” *Medical History Supplement* no. 10 (1990): 56-66.

remedies, and they imagined that chemical analysis could reduce observed phenomena into knowable pieces.

Historians have also discussed chemical analysis specifically in the context of spa towns and the commodification of their waters. M. D. Eddy's work on Reverend Dr. William Laing (1742-1812) indicates that the ambitious clergyman-turned-doctor/scientist conducted similar tests, the results of which he used to enumerate the medicinal qualities of the mineral water unique to his place of residence in Peterhead Spa, Scotland.<sup>92</sup> Eddy argues that Laing ensured his position as a physician and clergyman of the town by contributing to its economic prosperity; it was his "strategic appropriation [of] practices and theories that were the domain of medical chemistry" that helped legitimize Peterhead Spa's utility as a health spa while at the same time assuring Laing the patronage of the town's elite. Thus, even in the early modern period, chemical approaches were developed and deployed in the service of medically commodifying mineral water while they simultaneously helped carve out an authoritative space for the scientifically inclined practitioners who advanced them.

Publicists of a new settlement in the Ozark Mountains of rural Arkansas that sought out chemists in a quest to medically legitimize their waters were thus tapping into a well-worn technique by the late nineteenth century, and they were doing so for similar economic and authoritative reasons. Early studies showed that compared to other famous mineral water spots, Eureka Springs's water contained relatively few solid and gaseous elements. Rather than claiming that the chemists and their analyses were

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<sup>92</sup> M. D. Eddy, "'An Adept in Medicine': the Reverend Dr William Laing, nervous complaints and the commodification of spa water," *Studies in History and Philosophy of Biological and Biomedical Sciences* 39 (2008); 1-13.

unable to shed light onto the reasons for the springs' healing powers as promotions a decade earlier had, a booklet produced in 1899 understood this to be the water's greatest strength. "[T]he absence of mineral matter in the water," the writing following Potter and Riggs' analysis reads, renders its "osmotic property...greater than that of any known water, and it rapidly filters through all the tissues of the body, literally washing out all impurities."<sup>93</sup>

The information in the analyses was not changing—the same numbers appear in almost all advertisements from 1880 to the 1920s—but the way it was interpreted and accommodated into a narrative of therapeutic efficacy was. By constructing a discourse of purity and cleansing from what previously was understood as a fault in the water's chemical composition, marketers of the town validated the uniqueness and merit of the springs while also reinforcing the ability and authority of the "analytical chemists of the highest reputation" who had studied the water to explain its salubrity. A new kind of medical meaning was constructed for the springwater, this time integrating chemical discourse into the knowledge surrounding the water.

### *The Rise of "Practical" Chemistry*

This change of heart can be explained in part by the transition professional chemistry was undergoing in the nineteenth century. Christopher Hamlin has written on it and asserts that the beginning of the nineteenth century saw the rise of what he terms the "practical chemist." Though his work centers on the phenomenon in England, its general conclusions seem to hold true for American chemistry as well. Practical chemists, in Hamlin's view, produced scanty original research, but their public presence

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<sup>93</sup> *The Eureka Springs of Arkansas. Illustrated.* (n.p., 1899). Special Collections, University of Arkansas Libraries, Fayetteville.



and ability to sell chemistry as the answer to many of society's most pressing problems was consequential.<sup>94</sup> Making a name for themselves and their profession, however, was difficult at first. Many had to diversify the kinds of services they offered, often constructing an opportunistic and piecemeal career. One area in which they were particularly successful was the testing of mineral waters for health spa proprietors. Indeed, their efforts were apparently sought after enough to warrant requests; according to a newspaper article from the *St. Louis Globe-Democrat* printed in 1882, the Professor Potter who provided the oft-published analysis of Eureka's waters got at least one request a week for an analysis of spring water. As a chemist supported by a university, he did not have the financial need to seek out this kind of work and decided to charge a prohibitively high fee to put off potential clients.<sup>95</sup>

Juan H. Wright, the chemist responsible for the gaseous analysis, however, would not have taken such an action. More in the vein of Hamlin's practical chemist, he held no university appointment and was constantly on the lookout for an opportunity to ply his trade in novel spaces. In addition to his work in Eureka Springs the year of 1882, Wright analyzed water from several other springs in Arkansas and some in Texas and Kansas.<sup>96</sup> An 1883 analysis of the Artesian Well in Sioux City, Iowa, by the apparently

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<sup>94</sup> Christopher Hamlin, *A Science of Impurity: Water Analysis in Nineteenth Century Britain* (Berkeley: University of California Press, 1990), 50.

<sup>95</sup> "Scientists on Springs. The Academy Discusses Medicinal Waters - Engelman, Potter and Nipher Give Their Experiences." *St. Louis Globe-Democrat* (St. Louis, Missouri), January 17, 1882.

<sup>96</sup> E. H. S. Bailey, "Vol VII. Special Report on Mineral Waters," in *The University Geological Survey of Kansas* (Topeka: W. Y. Morgan, 1902), 277-279, 300. Albert C. Peale, *Lists and Analyses of the Mineral Springs of the United States* in Bulletin of the USGS no. 32 (Washington: Government Printing Office, 1886), 97-98.

busy doctor was printed in *The Proceedings for the Iowa Academy of the Sciences*.<sup>97</sup> Like many other chemists in the latter half of the nineteenth century, Wright felt the need to supplement his work on spring water by offering other analytical services. An advertisement for Royal Baking Powder, appearing in newspapers from New York to California, included a statement by Dr. Wright assuring customers that it was of the purest quality.<sup>98</sup> He offered the same guarantee to consumers of Ira Bouttel & Co.'s pure apple vinegar in an 1883 advertisement.<sup>99</sup> If his life had not been tragically cut short in October of 1883, there is little doubt his commercial chemical enterprise would have expanded even further.<sup>100</sup> As an arbiter of the microscopic or otherwise undetectable content of substances, Juan Wright, like many other chemists of his day, asserted his authority; marketing officials who stood in denial of this new jurisdiction did so at their peril.

### *Chemistry and Medicine*

If chemists were proffering explanatory theories and techniques in the larger effort to assess, categorize, and operationalize therapeutic efficacy, the medical men

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<sup>97</sup> Alfred N. Cook and C. F. Eberly, "The Sioux City Water Supply," in *The Proceedings of the Iowa Academy of the Sciences for 1901*, vol. 9 (Des Moines: B. Murphy, 1902): 90-101.

<sup>98</sup> Juan H. Wright, M. D., and Albert Merrell, M. D. "Monumental Evidence – For Strength, Purity, and Wholesomeness, the Royal Baking Powder Stands Unsurpassed!" *Daily Evening Bulletin* (San Francisco, CA) December 28, 1882. Same article in *News and Observer* (Raleigh, NC), January 6, 1883; *St. Louis Globe-Democrat* (St. Louis, MO), June 10, 1884; *Rocky Mountain News* (Denver, CO), July 14, 1884; *Milwaukee Sentinel* (Milwaukee, WI), July 22, 1884; *Southwestern Christian Advocate* (New Orleans, LA), August 28, 1884; *Frank Leslie's Illustrated Newspaper* (New York, NY), January 6, 1883; and *Galveston Daily News* (Houston, TX), January 12, 1883.

<sup>99</sup> "Pure Apple Vinegar Vs. Sulphuric Vinegar." *St. Louis Globe-Democrat* (St. Louis, Missouri) April 8, 1883.

<sup>100</sup> "Yesterday's Death List," *St. Louis Globe-Democrat* (St. Louis, Missouri), October 09, 1883.

spearheading the endeavor had ambivalent feelings about their participation. As discussed in the last chapter, some of the town's resident physicians resented the intrusion, passionately denying the chemist's ability to reveal the invisible active principle(s) in the water. A self-proclaimed outside medical observer (always a dubious declaration in the age of boosterism), J. J. Jones, Sr., wrote to the *Arkansas Medical Monthly*, a publication whose aim was to provide a communicatory platform for the physicians of the state, in June of 1880 to discuss the credibility of the claims flowing from Eureka Springs. Jones, who admittedly went into his survey under the assumption that many of the reports were false, found his "delusion" dispelled. Invalids were indeed benefitting from the waters; as a man of "observation and experience," Jones witnessed the mass healing himself. Upon his arrival, only the analysis by Professors Potter and Riggs had been conducted. Jones found it inconclusive and poorly done, but he held out hope that another would be administered, this time on-sight—"the proper place" for the tests to be run. He still, however, leaves open the possibility that chemical analyses as a whole would prove inadequate insofar as providing an explanation of the waters' frequently witnessed therapeutic power. "Although every analysis may fail to discover its active ingredients, yet the facts are demonstrable, unmistakably so, that it produces the effects attributed to it. Thousands are here to-day ready to testify to it."<sup>101</sup>

Chemistry is welcome in Jones's medical discourse on the springs only when it provides conclusive evidence in favor of what he has already seen firsthand—the empirical overrides the theoretical, the clinic overrides the laboratory. Here, it seems that Jones is engaging in a kind of combative discursive practice by sidelining or

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<sup>101</sup> J. J. Jones, Sr., "Letter from Eureka Springs," *Arkansas Medical Monthly* 1, no. 3 (1880), 148.

devaluing ways of knowing that do not reinforce his own. Interestingly, however, he appears to be engaging with chemistry. He points to specific problems with the extant analysis, problems recognized and widely discussed within professional chemistry itself.<sup>102</sup> He also maintains hope that another analysis may provide an explanation, in which case it would presumably join testimonial evidence in the vindication of Eureka's healing waters. The discourses, commensurable at least with regard to the healthfulness of the springwater, could then successfully co-create an understanding of the waters' salubrity.

Dr. Jones was not the only physician extending a hesitant hand to chemistry. The two disciplines had walked side by side for some time in *materia medica* and pharmacy, but the relationship between chemistry and medicine was becoming more intimate at the end of the nineteenth century. Robert E. Kohler has written on the development of biochemistry in America and has observed that more and more medical schools inaugurated advanced chemistry courses in the last few decades of the nineteenth century. Indeed, he argues that, amidst wider efforts to improve medical education in the United States, chemistry departments—particularly ones with well-populated laboratories—were “a common sign of an improving spirit in the 1880s and 1890s.”<sup>103</sup> Perhaps even more telling is the fact that chairs of chemistry were often the

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<sup>102</sup> A major disagreement among chemists was whether water transported from its source and tested in a laboratory was not altered in content by its journey. Some believed only on-site testing was guaranteed to produce accurate results. For more on interprofessional arguments over methods for the analysis of mineral waters, see Hamlin, “The Most Difficult Operation in Chemistry: The Analysis of Mineral Waters,” in *A Science of Impurity*.

<sup>103</sup> Robert Kohler, *From medical chemistry to biochemistry* (Cambridge: Cambridge University Press, 1982), 116.

first to attain salaried status.<sup>104</sup> Part of this trend is no doubt attributable to the focus most medical school chemistry professors placed on teaching practical applications of chemistry, in toxicology as well as urinalysis. Basic analytical chemistry was often part of the curriculum, which would have rendered the chemist's language and methodology comprehensible to most physicians.<sup>105</sup>

The close association between the two fields was also the case in the state of Arkansas, where the only medical school required students to take chemistry the first two years of their three year degree program.<sup>106</sup> James A. Dibrell, dean of the medical school from 1886 to 1904, may have had something to do with the new, relatively underdeveloped school's early emphasis on chemistry.<sup>107</sup> In a speech given at the twelfth session of the State Medical Society of Arkansas in 1887, Dibrell waxed poetic on the amazing things science has done and will continue to do for the medical profession. He describes chemistry as "a blazing light," particularly useful in determining therapeutic accuracy and modes of action.<sup>108</sup> Though by no means a clear indication of the feeling of every physician in the state, Dibrell's prestige within the profession and influence as a professor would have rendered his sentiments on chemistry, and science more generally, more authoritative than most. By the end of the

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<sup>104</sup> Kohler, *From medical chemistry to biochemistry*, 116.

<sup>105</sup> This was especially true of Victor C. Vaughan's chemistry department at the University of Michigan Medical College from 1871-1921. See Kohler, "European ideals and American realities," in *From medical chemistry to biochemistry*.

<sup>106</sup> Dibrell was Professor of General, Descriptive, and Surgical Anatomy of the university at its founding in 1879. See W. David Baird, *Medical Education in Arkansas, 1879-1978* (Memphis: Memphis State University Press, 1979), 43.

<sup>107</sup> For more on Dibrell, see Baird, *Medical Education in Arkansas*, 29, 32, and 35.

<sup>108</sup> "Annual Address of the President," *Transactions of the State Medical Society of Arkansas* (Little Rock: Press Printing Company, 1887), 18-19.

1880s, then, it appears that in most outward aspects, the discourses of chemists and physicians on therapeutics were, with some reservations, in line with one another.

### *Chemistry and the Layperson*

It is more difficult to ascertain the level of chemistry's inclusion in vernacular discourses surrounding the springs. Christopher Hamlin has argued that the analyses simply provided comfort and legitimacy to mineral waters by symbolizing "that someone knew what was going on, [and] that the medicinal environment one was to encounter was comprehended and would be applied in a precise and rational way."<sup>109</sup> By Hamlin's reckoning, the health-seeker neither understood nor participated in the discourse of chemistry; he or she was a passive consumer of chemical language and knowledge, indiscriminately receiving while simultaneously basing important health decisions upon it. "[I]t was the appearance of thoroughness," he argues, "that was to impress the reader."<sup>110</sup> While this may have been the case for some, it is my contention that the relationship between vernacular and chemical discourses was more nuanced. Evidence of public participation in the conversation can be found in advertising material, where publicists' translations of the chemists' work and patrons' understanding of it is clear.

Testimonials became exceedingly rare in newspapers, pamphlets, and booklets published toward the end of the 1880s and onward. Instead, lists of "cures" of "prominent" visitors populate the final pages, their addresses often included.<sup>111</sup> The potential patron could contact the satisfied customer if he felt so inclined, but lay

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<sup>109</sup> Hamlin, *A Science of Impurity*, 54.

<sup>110</sup> Ibid., 54.

<sup>111</sup> *The Eureka Springs of Arkansas. Illustrated* (1890), 29-30; *Eureka Springs, Arkansas* (1887), 27.

narratives lost the central place they had occupied a decade prior. This is perhaps indicative of a shift in vernacular therapeutic discourses. While they still understood empirical, experiential evidence to be important, Eureka's marketers were allocating more space in their publications to detailed tables and explanations of their contents. The following spread displays this trend.

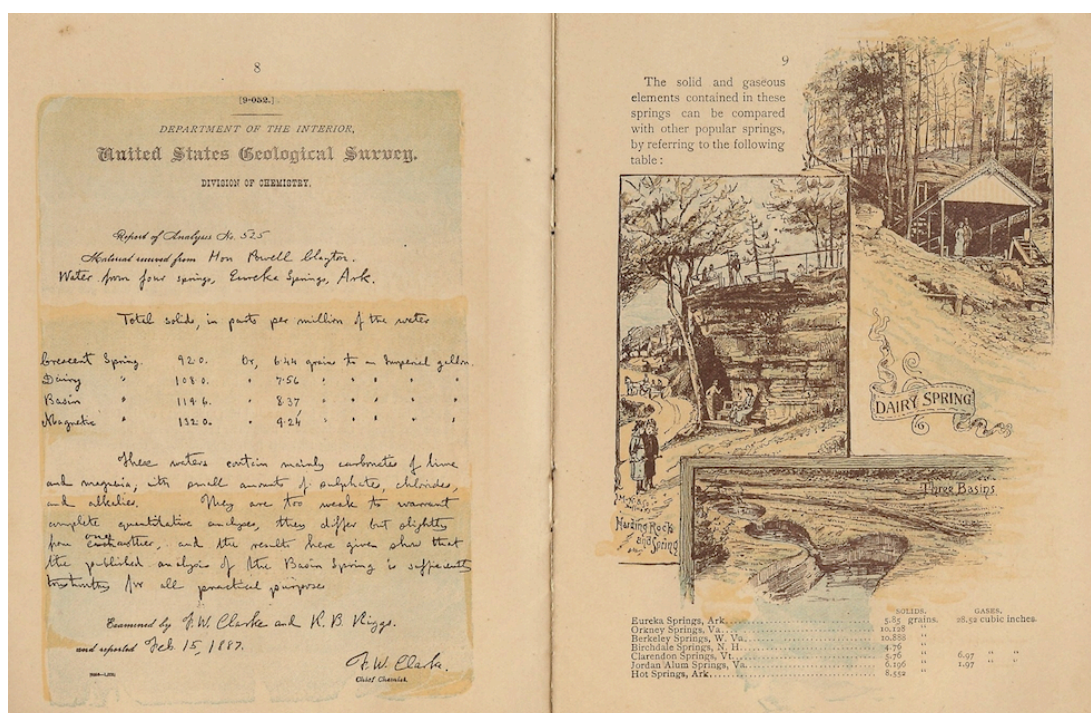


Figure 2. Chemical analyses. 1887, Print. In *Eureka Springs of Arkansas*. St. Louis: Woodward & Tiernan Printing Co., 1887. 7-9. Special Collections, University of Arkansas Libraries, Fayetteville.

The analyses take up both pages, and they are supplemented on the following page by explanatory text, bringing the grand total of page allocation to three in a booklet that has just a page devoted to the names and addresses of potential testimonial providers. The authority and objectivity of the data is augmented by its presentation in the form of an official document from the United States Geological Survey, on which

the names of those involved, the date on which the testing was conducted, and the unadorned results are displayed.

Bare results were almost always translated into narratives more intelligible to a lay audience, which gives some credence to Hamlin's argument that their inclusion was more indicative of chemistry's rising cultural authority than discursive commensurability among vernacular and scientific actors. It does not appear that it was expected that the average health-seeker would read health benefits straight from the tables. This does not, however, mean that the everyday medical consumer failed to integrate developing chemical discourse into his or her understanding of the medical action of the springwater.

One booklet published in 1899 provides a particularly detailed interpretation of the analyses. It cites five "facts" taken from a paper read before the World's Congress of Medico-Climatology in Chicago in 1893. They stipulate that pure water—which chemists had proven flowed from Eureka's springs—is one of the most difficult things to find in nature, but it is also one of the healthiest; "most diseases," the paper read, "arise from and depend upon defective solution, distribution and elimination of matter soluble in pure water." Drinking pure water, then, would aid the system in ridding itself of these blockages. Mineral water, on the other hand, was of no use in disease. Indeed, it was "spoiled, except for an exceedingly small number of special uses."<sup>112</sup>

Here, the analyses are said to have demonstrated the purity of the springs, an argument which seems plausible, particularly considering the comparison also provided between Eureka Springs' waters and those of other famous health resorts. Eureka's

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<sup>112</sup> *The Eureka Springs of Arkansas. Illustrated.* (1899), 11-12.



springwater contains only half the amount of dissolved solids as Berkeley Springs and that of its most serious competitor, Hot Springs. Then, a physiological mechanism replete with medico-chemical terminology such as “solution,” “distribution,” and “elimination,” for their health-giving properties is posited, which not only serves to make the waters healthy and unique but ascribes to them the properties of a panacea—a rare and medicinally invaluable production of nature’s laboratory capable of curing a vast swathe of humanity’s most chronic and obstinate conditions.

As it turns out, the purity of the water being the primary reason for its medical value was first raised by a citizen in 1888. An article in the June 1894 issue of the *Eureka Springs Medical Journal* details its journey to acceptance and use in promotional material, claiming that, at least initially, it was looked down upon by the town’s publicists. It was “not tall [sic] long after the public was educated to the pure water theory,” however, that it was widely accepted—potentially due to popular pressure<sup>113</sup>—and began to appear in booklets, ads, and brochures.<sup>114</sup> The author (unfortunately unknown)<sup>115</sup> goes on to reprint part of an article from the *Eclectic*

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<sup>113</sup> Though they were organized through the Commercial Club for most of the nineteenth century, Eureka Springs’s marketing efforts seem to have been a widespread concern, with varied levels of mass participation. The town’s primary newspapers (and even the medical journal at times) are rife with calls to the community to take an active role in advertising. See “Eureka Springs is better advertised today...” *Daily Times-Echo* (Eureka Springs, Arkansas), February 5, 1898 and “Advertising Our City,” *Eureka Springs Medical Journal* 2, no. 1 (1894), 3.

<sup>114</sup> “Pure Water in the Cure of Disease,” *Eureka Springs Medical Journal* 2, no. 4 (1894), 1.

<sup>115</sup> Context clues seem to indicate it was a local physician. His or her syntax is characteristic of a southerner, potentially a native Arkansan, and he/she seems to have a fairly sophisticated grasp of the medical and physiological language used to articulate the theory. The emotion with which the author writes about the issue points toward more than a passing interest in his/her reputation amongst Eureka and in the town’s success as a health resort.

*Journal and Family Advisor* that details the therapeutic action of pure water, delving at times into other aspects of environmental health. The water is understood to “give mobility to the fluids” and “carry in solution various substances” to their destinations—whether that be nourishment to an organ or waste to its disposal.<sup>116</sup> It is clear that the author of the article and that of the 1899 booklet ascribe to the same theory of the waters’ healthfulness, though the language used in the medical journal is slightly more technical in nature.

This narrative of chemical purity, expounded by chemists, developed by physicians, and translated by publicists, served both to legitimize the waters’ healing properties and to locate them distinctly in Eureka Springs, Arkansas. Chemical discourse was thus integrated into an understanding of the springs’ distinctiveness and health-giving capabilities, and it was done so with a vernacular medical awareness in mind. That being said, not everything *needed* to be translated; not all of the chemical and medical language was stripped away in explanations of the chemists’ findings. Chemists, doctors, and the average person all understood the concept of purity in much the same way. And though they may have been using slightly different language at times, the narratives of healthfulness that physicians and patrons employed were often strikingly similar.

This is evident in one of the few post-1885 samples of testimonials, found in the booklet published in 1903 that opened this chapter. Ten pages at the end of the sixty-five-page publication contain twenty-nine accounts of healing at the springs. Most tell the same story their counterparts from the springs’ first marketing publications did. An

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<sup>116</sup> “Pure Water in the Cure of Disease,” *Eureka Springs Medical Journal* 2, no. 4 (1894), 1.

ill individual, marked for death by his doctors, comes to Eureka in a last ditch effort to restore his or her health and is gloriously successful. With far more frequency than earlier brochures, however, these accounts contain references to the purity of the water, the primary accolade it was awarded by interpreters of its chemistry. James Ashby of Chicago is quite characteristic. He took the water's purity to be the reason for its health-giving effects when it cured a coworker's cancer; "I prize the water of some of the springs so highly on account of its purity that I have it shipped to me here in cases for regular use..."<sup>117</sup> This indicates that patients were imbibing and integrating a piece of the chemists' discourse on Eureka Springs's water into their own; the two understandings were overlapping and creating one another as opposed to existing in isolation or being passed from one party to another indiscriminately.

Another example of chemical knowledge seeping into popular discourse can be found in the testimonial of W. E. Jones of St. Louis, Missouri, who wrote in November of 1900 of his wife's trip to the springs after a debilitating bout of typhoid fever.

I wish to say unhesitatingly that the pure air and water of Eureka Springs are entitled to great credit for her very decided improvement. As a place for convalescence, the pure mountain air, wonderful water, and the beautiful scenery combine to give very ideal conditions.<sup>118</sup>

Interestingly, however, the water plays a relatively minor role in Jones's understanding of his wife's recovery. Just as prominent is the air and scenery.

### **Climatology**

Indeed, when considered as a whole, the testimonials seem to include just as much detailed commentary on the climate and surroundings as the springwater. Take

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<sup>117</sup> John W. Kearney, *The Summit of the Ozarks* (Buffalo: Matthews-Northrup Works, 1903), 63.

<sup>118</sup> *Ibid.*, 61.

the exuberant report of George T. Williams of Chicago,<sup>119</sup> longtime victim of stomach troubles and dyspepsia:

I found the climate good, the mountain air, drives, and horseback riding most enjoyable, and grand to restore one's health. I know of no better place in this country for a person run down in health, tired, or suffering from nervous prostration in which to rest and build up than Eureka Springs. I wish I could spend every April and May there.<sup>120</sup>

Or that of H. W. Blodgett of Waukegan, Illinois, who writes in December of 1898 to say, "I have visited Eureka Springs... to escape the rigors of our cold winters and springs. [...] Indeed, as a 'health resort,' when air and water are both taken into consideration, I deem Eureka Springs equal to any I have ever visited."<sup>121</sup> J. G. Dudley of Paris, Texas attributes the healthfulness of the resort to similar virtues:

Having spent four summers at Eureka Springs... enjoying its delightful climate and drinking its marvelous waters, I am prepared to state that in my opinion, as a health resort and as a place for building up of an overworked or run down system, it has no equal in the Southwest. The air is perfectly pure and exhilarating. The scenery is grand beyond description...<sup>122</sup>

Important in these narratives is the pure, exhilarating air, the mild temperatures,<sup>123</sup> the stunning scenery, and the fact that all three can only be found in such salubrious equilibrium in Eureka Springs, Arkansas. In emphasizing these attributes and understanding them as geographically specific and interrelated with regard to their effects on human health and well-being, the authors of these testimonials were playing

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<sup>119</sup> It can be established that George T. Williams and his wife did indeed visit Eureka Springs at least once, which means this testimonial is in all likelihood authentic. See "Personal." *Daily Inter Ocean* (Chicago, Illinois), April 10, 1892.

<sup>120</sup> Kearney, *The Summit of the Ozarks*, 58.

<sup>121</sup> *Ibid.*, 61.

<sup>122</sup> *Ibid.*, 59.

<sup>123</sup> Though the testimonials do not employ the term "mild," their authors consistently contrast the "harsh" or "rigorous" winters and summers of their homes with the "pleasant" temperatures in Eureka.

into a discourse already developed by an increasingly active group of scientists interested in the field of medical climatology.

Historians have produced a substantial amount of literature on medical climatology, paying particular attention to its development and consequences in colonial settings. Ideas linking local climates to health are ancient, historians often trace their articulated origins to Hippocrates' *Airs, Waters, Places*, written sometime in the fifth century B.C.E. European exploration and colonization brought westerners into contact with peoples and environments drastically different from their own, and one way they attempted to understand their difference was through what has later been termed climatic determinism—the weather, winds, waters, and airs of a place, they believed, had a profound influence on the physiology and psychology of the humans that lived there. Because of the far-reaching consequences this discourse had for colonial endeavors and the people Europeans enslaved, displaced, disrupted, and otherwise dehumanized, it should come as no surprise that much of the scholarship on climatology has centered around its relationship to imperial enterprise, race, power structures, and the shaping of the Other.<sup>124</sup>

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<sup>124</sup> This emphasis has been recognized by other historians interested in climatology as well. See “Modern Airs, Waters, and Places,” eds. Allison Bashford and Sarah W. Tracey, special edition *Bulletin of the History of Medicine* 86, no. 4 (2012). Though by no means an exhaustive list, the following are recent examples of this valuable and important field of literature; Harriet Deacon, “The Politics of Medical Topography: Seeking healthiness at the Cape during the nineteenth century,” 279-297, in *Pathologies of Travel* eds. R. Wrigley and G. Revill (Amsterdam: Rodopi, 2000); Vladimir Jankovic, “The Last Resort: A British Perspective on the Medical South, 1815-1870,” *Journal of Intercultural Studies* 27, no. 3 (2006): 271-298; Eric T. Jennings, *Curing the Colonizers: Hydrotherapy, Climatology, and French Colonial Spas* (Durham, N.C.: Duke University Press), 2006.

One important point many of authors writing on climatology in colonial settings make is that very rarely is knowledge about the climate of a location produced and understood “objectively.” Mark Carey has developed this idea in his work on the construction of climates in Peru and the British West Indies. He argues that perceptions of climate have historically had just as much to do with “environmental, social, cultural, political, intellectual, and economic factors... as with scientific knowledge and atmospheric conditions.”<sup>125</sup> His work shows that hot, humid climates once understood to be incredibly harmful to European constitutions were by the mid-twentieth century being marketed as healthful retreats, largely independent of medico-scientific developments often thought to be monumental in the making of modern bio-medicine. If climates were being constructed in the global south, Americans—specifically those settling western regions like Arkansas—were certainly keeping up with the times.

*Professional Climatology in the United States*

Historian Billy M. Jones has written on the development of a professional American climatology and its role in the colonization of the Western frontier.<sup>126</sup> He has traced American physicians’ interest in the science of climate’s effect on health since the mid-nineteenth century, which culminated in the 1884 foundation of the American Climatological Association. One of the architects of the association, Charles Denison of Denver, Colorado, was, in Jones’s estimation, the first of the group to advocate for a formalized effort to convert the qualitative, testimonial evidence of invalids, like that of

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<sup>125</sup> Mark Carey, “Inventing Caribbean Climates: How Science, Medicine, and Tourism Changed Tropical Weather from Deadly to Healthy,” *Osiris* 26, no. 1 (2011), 131.

<sup>126</sup> Jones did not use the term “colonization” to describe the process, referring to it instead as “settlement.” I have chosen to change it in order to acknowledge the imperial nature of American westward expansion and the people that lived on the land before being forcibly removed.

Williams, Blodgett, and Dudley, into quantitative data that could be used by doctors everywhere in diagnostics and therapeutic recommendations.<sup>127</sup> Keenly aware of the vacuum the distrust in drug-based therapeutics had created, he hoped to fill it with a systematized climatotherapy.

The print below, which maps out climatic information including winds, cloud cover, and precipitation onto the geography of the United States, was printed and sold to doctors and the public alike. Underneath the map (not pictured here) are tables indicating elevation, annual temperatures (mean, variation in, maximum and minimum), dew points, cloudiness, humidity, precipitation, and wind strength/prevalence for most major cities. Though Denison pulled the information used to create this graphic and the tables below it from data compiled by the Signal Service Bureau, he hoped to one day incorporate observations from representatives of health resorts.<sup>128</sup>

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<sup>127</sup> Billy M. Jones, *Health-Seekers in the South West 1817-1900* (Norman, University of Oklahoma Press, 1967), 130-133.

<sup>128</sup> Charles Denison, *The Best Welfare of Invalids Seeking the Benefits of Climate: with Suggestions for the co-operation of Physicians, Life Insurance Officials, etc.* (Denver: privately printed, 1875), 7-8.

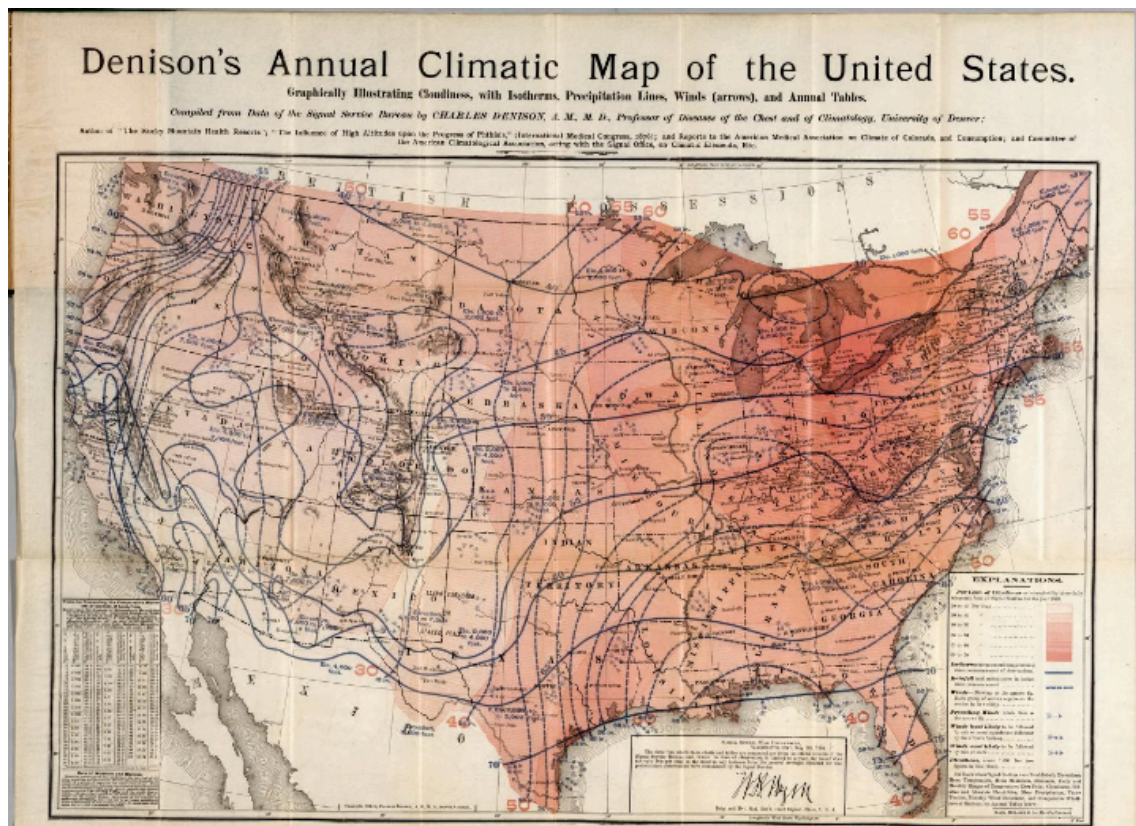


Figure 3. Charles Denison, *Denison's Annual Climatic Map of the United States*. 1884, Print. 45 x 71 cm. Chicago: Rand, McNally & Co., 1884. From: David Rumsey Historical Map Collection.

Denison and his colleagues were developing the discourse of a professional medical climatology, whose quantitative foundation and wide scope gave it an overarching legitimacy. They were providing the language and the methodological basis from which the local construction of climates could draw, and Eureka Springs's publicists would capitalize on this opportunity.

Though, as Carey and others have established, the climatological characteristics understood as being healthy are often temporally and geographically specific, we can make some general statements about what sort of environments individuals, scientists, and doctors took to be healthy in the latter half of nineteenth-century America. Jones



has found that early physicians interested in climatotherapy believed that locations with mild weather, plenty of sun, dry air, and a relatively high elevation tended to be the most healthful.<sup>129</sup> This is corroborated by Conevery Bolton Valenčius's work on mid-nineteenth-century settlers in Missouri and Arkansas, who understood extreme and quickly changing temperatures, cloudy skies, and low elevations to be health risks.<sup>130</sup> Given these facts and the discourse that supported them, scientists and doctors could make distinctions between healthful and unhealthful locations based on their climatological attributes if the data was available (and sometimes when it was not).

#### *Climatology and Physicians in Arkansas*

This was true of physicians in Arkansas, who, for all its faults, believed that their state was one of the most healthful in the union. In 1879, the year in which Eureka Springs was founded, attendees of the fourth session of the Arkansas State Medical Society listened to a speech given by the organization's president on the topic and the need to quantify it. E. T. Dale opened up the conference with the matter of vital statistics, a method for studying the public's health already in use in many states. It would be even more informative in Arkansas, he argued, as it was "one one of the most favored localities of any of the states, who have not near so many natural advantages." He goes on to list these assets, paying special attention to the state's lush forests, varied elevation (which was conducive to efficient drainage), "fine" springs, and fertile soil. Of the northwest portion he is particularly fond, possessing as it does "all the

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<sup>129</sup> Though ideas of particular climatological characteristics as healthful changed over time, these were relatively constant, especially in the American setting. High elevations became particularly popular in the late nineteenth century. Jones, *Health-Seekers in the South West 1817-1900*, 142-143.

<sup>130</sup> Valenčius, *The Health of the Country*, 25, 27, 88-89, 97.

advantages that any upland and mountainous country can possess,” and offering to its residents and visitors “the health generally found in in the most elevated... districts of the earth.”<sup>131</sup> If physicians and legislatures would only organize these anecdotal observations through statistical inquiry, they could not only protect their citizens’ health, but, Dale believes, Arkansas would emerge as a health spot as notable as some of its northern brethren.

Hints at a climatological consciousness among physicians can be found within less formal texts as well. In detailing the journey of the delegates from the state medical society to the national meeting of the American Medical Society in Atlanta, Georgia, the chair of the group ended his professionally focused account of the proceedings with a comment on the men’s corporeal experience. The “climate, air, and water” of Atlanta, combined with the lovely sights the city had to offer, rendered the party relaxed and ready to resume their regular Arkansas practices.<sup>132</sup> Thus, in both their everyday lives and their practices, Arkansas’s medical men understood temperature, weather, air, and water to be intimately tied to health and happiness. Indeed, the medical men of Arkansas apparently found environmental health important enough—no doubt for the state’s health tourism industry as well as for use in everyday practice—to include in their medical curriculum. Three years after its foundation in 1879, the Medical Department of the Arkansas Industrial University (the state’s first medical school) began offering a course in medical meteorology. Taught by W. U. Simmons of the U. S.

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<sup>131</sup> E. T. Dale, “The President’s Address,” *Transactions of the State Medical Society of Arkansas at its Fourth Annual Session* (Little Rock: Blocher & Mitchell, 1879), 35.

<sup>132</sup> W. H. Hawkins, *Transactions of the State Medical Society of Arkansas at its Fourth Annual Session* (Little Rock: Blocher & Mitchell, 1879), 43.

Weather Bureau, the class covered, in addition to the basics of meteorology, the weather and climate's effects on health, specifically with regard to malaria and consumption.<sup>133</sup>

The doctors of Eureka Springs were predictably even more interested in developing discourses of environmental health, as evidenced by the prevalence of articles concerning climate and health in the *Eureka Springs Medical Journal*. One discusses the effect of climate on the development of children. Unsurprisingly, the best and brightest come from the west, and sunny, dry, temperate, elevated locations produce the most well-balanced individuals.<sup>134</sup> Eureka Springs, then, in addition to being an excellent place for a health retreat, would appear to be a prime spot for raising a child. A later issue brings its readers' attention to the World's Congress of Medico-Climatology, to be held in San Antonio, Texas in February of 1896. Doctors are encouraged to come for several reasons: to learn about climates and how they can be therapeutically beneficial; to "set forth the advantages of your own section or State in regards its climatic advantage"; and, as the convention is always held at a health resort, to assess the place and have a much needed vacation.<sup>135</sup> The editors of the journal made decisions about which aspects of a larger medical discourse they would include in their publication with Eureka's success in mind, hoping to validate climatotherapy and encourage their brethren to learn more about it by reading and attending conferences concerned with it. Referrals, they trusted, would follow.

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<sup>133</sup> Baird, *Medical Education in Arkansas, 1879-1978*, 43.

<sup>134</sup> T. C. Duncan, "Effects of Climate on the Development of Children," *Eureka Springs Medical Journal* 2, no. 1 (1894), 1.

<sup>135</sup> "World's Congress of Medical Climatology," *Eureka Springs Medical Journal* 2, no. 9 (1896), 3.

### *Climatology and the Layperson at the Springs*

Climatology appeared in other Eureka Springs's marketing material as promoters played into this discourse with gusto, supplementing climatological data with its health benefits in the pamphlets, booklets, and newspaper articles they produced. Its elevation, one booklet published in 1899 reports, is 2,000 feet, and its mean annual temperature is 58.93 degrees, with summers averaging just 74.79 degrees. The weather is thus neither oppressively hot, nor is it ever incredibly cold; the "uniformly cool nights give quiet, refreshing sleep," which is very important, as "refreshing sleep is a factor in cure."<sup>136</sup> The altitude and lack of standing water render the spot immune from malarial influences. Interestingly, the booklet goes on to compare average rainfalls, temperatures, and elevations to the resort town that was its most serious competitor, Hot Springs, Arkansas. In the middle of the state, Hot Springs is subject to significantly more rainfall and heat year round, and its elevation is far less desirable from a climatologist's perspective. The choice between the two should have been obvious for the scientifically informed health-seeker.

Another booklet, pictured below, gives detailed data on Eureka Springs and sixteen other locations (some health spots and others simply prominent cities) in an easy to read table. This format is reminiscent of that used by Charles Denison, solid evidence that promoters of the springs were playing off of and perhaps contributing to larger medico-climatological discourses. Interestingly, there is no explanation of the table's contents; the audience was expected to read and understand its significance in relation to their choice of a health resort. In this sense, in a much more immediate way than that

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<sup>136</sup> *The Eureka Springs of Arkansas. Illustrated.* (1899), 7-8.

of chemistry, climatological discourse would appear to have been more democratic, completely comprehensible from its numerical foundations to scientist, physician, and layperson.

Altitude Above Sea Level. Feet.	NAME.	Annual Average Precipitation, Inches.	MEAN TEMPERATURE, DEGREES FARENHEIT.				
			Spring.	Summer	Autumn	Winter.	Annual.
2,000	Eureka Springs ..... Ark.	32.79	60.85	74.79	58.01	42.08	58.93
610	Hot Springs ..... "	56.00	56.89	81.57	57.01	51.77	61.81
2,339	Asheville ..... N. C.	40.20	45.90	73.30	...	40.00	...
13	Atlantic ..... N. J.	44.16	47.40	70.40	56.20	33.90	51.97
60	San Francisco ..... Cal.	24.88	54.60	58.50	58.20	51.30	55.65
357	Los Angeles ..... "	17.89	58.40	67.80	62.70	53.60	60.62
6,000	Colorado Springs ..... Col.	15.87	42.80	67.90	47.10	27.10	46.22
801	St. Paul ..... Minn.	28.32	43.90	69.50	45.70	17.00	44.02
615	Cleveland ..... Ohio.	39.33	45.80	69.90	52.00	28.20	48.97
30	Norfolk ..... Va.	50.33	57.00	77.30	60.70	42.20	59.30
43	Jacksonville ..... Fla.	55.29	69.10	81.40	69.90	56.80	69.30
571	St. Louis ..... Mo.	39.43	54.70	76.70	56.30	34.10	55.45
5,294	Denver ..... Col.	15.15	47.40	69.80	49.60	29.90	49.17
300	Thomasville ..... Ga.	.....	67.78	81.96	.....	54.55	.....

Altitude Feet.	NAME.	Annual Precipitation, Inches.	AVERAGE NUMBER DAYS PER ANNUM.			Relative Humid- ity, Per cent.	Death Rate Per 1,000 Living Popula- tion.
			Clear.	Fair.	Cloudy.		
2,000	Eureka Springs ..... Ark.	32.79	209	90	66	59.4	10.33
600	Hot Springs ..... "	56.00	162	70	133	.....	16.20
6,000	Colorado Springs ..... Col.	15.87	179	138	48	.....	.....
2,339	Asheville ..... N. C.	40.20	156	103	106	70.10	.....
43	Jacksonville ..... Fla.	55.29	124	156	85	77.00	.....
60	San Francisco ..... Cal.	24.88	146	139	80	72.90	20.50
357	Los Angeles ..... "	17.89	171	142	52	66.00	.....
13	Atlantic City ..... N. J.	44.16	120	136	109	79.90	.....
801	St. Paul ..... Minn.	28.32	105	159	101	68.50	.....
615	Cleveland ..... Ohio.	39.33	84	142	139	71.80	20.14
30	Norfolk ..... Va.	50.33	121	138	106	.....	.....
164	New-York City ..... N. Y.	43.48	100	153	112	68.00	25.37
142	Boston ..... Mass.	48.02	103	134	128	70.30	22.32
661	Chicago ..... Ill.	39.13	108	148	109	71.00	20.77
571	St. Louis ..... Mo.	39.43	119	144	102	67.50	20.07
5,294	Denver ..... Col.	15.15	161	148	56	46.50	.....
300	Thomasville ..... Ga.	.....	.....	.....	.....	64.00	.....

Figure 4. *Comparative Table of Altitudes, Precipitation and Mean Temperatures; Comparative Weather Statement, Etc.* 1887, Print. In *Eureka Springs, Arkansas*. St. Louis: Woodward & Tiernan Printing Co., 1887. Special Collections, University of Arkansas Libraries, Fayetteville.

This is a point further evidenced by the nature of the souvenirs, postcards, and photographs that memorialized peoples' visits to the springs. The pure air was Eureka Springs's most distinct climatological asset, but the pine trees that dotted its landscape played a role in filtering that air and rendering it healthful. Many postcard images feature the trees and other natural formations, emphasizing the vitality of the forest and blurring the line between the town itself and its bountiful, eden-like surroundings. The card below provides an excellent example. The setting could be indoors for all its elegance—the central figure sports a handsome dress, offering to the viewer a seat for a sip of springwater at her fashionably adorned table—but it is framed by natural rock formations and leafy vegetable life, betraying its external location. The indoor and the outdoor are thus mixed, presenting the viewer with the best of both.



Figure 5. *Lion Spring, Mrs. Belding*. 1898, Postcard. In *The Springs of Eureka Springs: historic archive*. Eureka Springs: Eureka Springs Historical Museum, 2008. Special Collections. University of Arkansas, Fayetteville.

Vladimir Jankovic has written on the importance of considering both the indoor and the outdoor when analyzing historical understandings of medical climatology, asserting that, especially in the nineteenth century, extreme sensibility to climates became a problem for urbanites whose artificial or unnatural places of work and living, characterized by “urban consumerism, sedentariness, indolence, and fashion,” were increasingly understood as detrimental to their health.<sup>137</sup> This harks back to the previous chapter and neurasthenia, and here we see two medical discourses, an intimate part of lay understandings of health as well, converge. In controlling personal climates, invalids with the means to do so found therapeutic solutions backed by scientific and medical opinion. Eureka behind the production of these postcards, hoping to attract the wealthiest of them, presented in this image intended for distribution an ultimate goal—the luxuries the indoors had to offer with the salubrity only a temperate, sunny, and green outdoor location could furnish.

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<sup>137</sup> Vladimir Jankovic, “Intimate Climates: From Skins to Streets, Soirees to Societies,” in *Intimate Universality: Local and Global Themes in the History of Weather and Climate* eds. James Fleming, Vladimir Jankovic, and Deborah Coen, 1-34 (Sagamore Beach: Science History Publications, 2006), 11-12.



Visitors to Eureka Springs also occasionally paid a photographer to capture images of themselves, and their choices of setting are telling. The photograph to the right, taken in 1890, is characteristic of many others.

Although the town had, at this point, several bath houses and hotels (including the Crescent, whose dignified face is featured on much of the promotional material after its construction), tourists often chose to have their images taken in natural

settings, frequently near springs and surrounded by foliage. Though the upper-

class accommodations no doubt played a part in their decisions to visit Eureka, it was the natural environment that proved impactful enough to warrant a more tangible piece of remembrance. Hotels could be found in the city; the pure mountain air and the trees that gave it its distinct, pine-laden smell, however, were novel and invigorating to the primed climatic consciousness.

Florence Hammersely, a tourist from Fort Smith, Arkansas, composed a scrapbook of her time at the springs around the turn of the century. Like the many



Figure 6. *Cave Spring*. 1890, Photograph. In *The Springs of Eureka Springs: historic archive*. Eureka Springs: Eureka Springs Historical Museum, 2008. Special Collections. University of Arkansas, Fayetteville.



visitors taking home wilderness-laden family photos, she skipped over the Victorian architecture and included only pictures of the scenery. Of the nineteen photographs she includes, only four of them show man-made structures, and even they are almost completely engulfed by foliage except for the photograph of a train, presumably leaving Eureka, that concludes her work. Just as telling as her focus on the town's natural attributes in the photographs she chooses to include, however, is the poetry that fills several pages of the book. One original<sup>138</sup> poem reads:

“As long as memory lasteth,  
I shall count ‘mid life’s sweetest things,  
The moonlit nights, the scent of pines,  
The hills of Eureka Springs;  
Where the purple twilight enfoldeth  
The day with peaceful calm,  
And the pine trees lulleth the tired soul,  
As the strains of an evening [indecipherable].”<sup>139</sup>

Here, as has been the case, there is a decided emphasis placed upon the smell of the air and its refreshing effects on the vacationer. Again, it is not hotels nor society that drove Hammersley to poetry. Though she does quote William Wordsworth at the end of the book, a testament to the influence of romantic poetry on the author, she is nonetheless moved by the natural environment of the Ozarks. This is a reaction that should come as

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<sup>138</sup> According to June Westphal, it was reprinted in a local newspaper under Hammersley's name in 1905 in the *Daily Times Echo*. I have been unable to locate it but have no other reason to disbelieve Westphal's claim.

<sup>139</sup> Florence Hammersley, “Scrapbook of Eureka Springs,” (1905), in *The Springs of Eureka Springs: historic archive* (Eureka Springs, AR: Eureka Springs Historical Museum, 2008), 4.

no surprise considering the discourse of health that had infused the region's characteristics with salubrious meaning.

This meaning and the fact that Hammersley and her health-seeking associates were able and amenable to understanding it in terms of climatology and chemistry was the result of a substantial amount of discursive work undertaken by marketers and scientists alike. Chemists had presented their analyses as ways of determining the contents of waters and thus making sense of their therapeutic powers. Medical climatologists had tabulated and geographically located previously qualitatively figured information about the nature of airs, elevations, and weather patterns, and they developed medically informed theories about how these factors influenced health. Publicists then framed the old narrative of Eureka's health within the bounds of the two sciences, translating what was not linguistically transferable between their discourses and those of laypeople.

That the producers of marketing material made the choice to restructure the town's salubrity, and that potential clientele began to understand their experiences at the springs in terms of purity and environment is an indication that a shift was taking place in vernacular trust from the testimonial to the data chart, empirical to inductive arguments, and one another to an outside, educated, and "objective" authority. Indeed, it is evident that as the voices of chemists, physicians, and climatologists were added to the conversation about Eureka Springs's salubrity, those of vernacular participants became more difficult to hear. It is important to remember, however, that it was the health-seeker and the publicist that allowed them to speak in the first place.

## **Conclusion**

It is clear from the changing claims about its therapeutic attributes that an epistemological transformation took place over the two decades between Eureka Springs's foundation and the turn of the century. The anecdotal evidence that supported the town's narrative of salubrity in its first years gave way to the kind of numerical and theoretical underpinnings characteristic of modern scientific and medical standards for determining truth, which were becoming increasingly sophisticated and institutionalized as the twentieth century approached. What did not change during the roughly twenty-five years covered by this study was the repeated assertion that something about the location of Eureka Springs was particularly and profoundly healthful, a solution to the ongoing crisis in therapeutics. The transformation in how that healthfulness was understood proves that the concept itself was constantly being renegotiated, and the processes that guided the course of its change indicate that wellness and what was understood as a viable means of achieving it was manufactured collectively. Groups of people informed and sometimes governed by their respective discourses contributed to the conversation in various ways, and where they met, knowledge and meaning were created.

I have shown that this knowledge was not created by a class of educated, intellectual elites to be passed down to an uncritical audience and that the contributions of vernacular participants were not only extant but an important and authoritative component of the discussion. I also have added to the already existing conversation concerning the complicated relationship between medicine and science, supplying more evidence from an understudied area of the ambivalence that characterized their contact

and exchange during the late nineteenth century. Studies acknowledging the importance of actors outside of medicine and science have had and continue to show great potential in adding nuance and depth to our understanding of the way that the two have interacted in the past. Through a microhistorical approach to the study of Eureka Springs, Arkansas, a town that sprung up during a pivotal moment in the history of scientific medicine and therapeutics, I have shown the way that meanings of health were co-constructed and contingent upon the myriad discourses, that of laypeople included, that built them.

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Fig. 1. *Descriptive and Historical*. 1887, Print. In *Eureka Springs, Arkansas*. St. Louis: Woodward & Tiernan Printing Co., 1887. Special Collections, University of Arkansas Libraries, Fayetteville.

Fig. 2. Chemical analyses. 1887, Print. In *Eureka Springs, Arkansas*. St. Louis: Woodward & Tiernan Printing Co., 1887, 8-9. Special Collections, University of Arkansas Libraries, Fayetteville.

Fig. 3. Charles Denison, *Denison's Annual Climatic Map of the United States*. 1884, Print. 45 x 71 cm. Chicago: Rand, McNally & Co., 1884. From: David Rumsey Historical Map Collection.

Fig. 4. *Comparative Table of Altitudes, Precipitation and Mean Temperatures; Comparative Weather Statement, Etc.* 1884, Print. In *Eureka Springs, Arkansas*. St. Louis: Woodward & Tiernan Printing Co., 1887. Special Collections, University of Arkansas Libraries, Fayetteville.

Fig. 5. *Lion Spring, Mrs. Belding*. 1898, Postcard. In *The Springs of Eureka Springs: historic archive*. Eureka Springs: Eureka Springs Historical Museum, 2008. Special Collections, University of Arkansas Libraries, Fayetteville.

Fig. 6. *Cave Spring*. 1890, Photograph. In *The Springs of Eureka Springs: historic archive*. Eureka Springs: Eureka Springs Historical Museum, 2008. Special Collections, University of Arkansas Libraries, Fayetteville.

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